



Characterisation of Family Farms in the Caribbean:

A Study of Guyana, Haiti, Jamaica,
and Saint Vincent and the Grenadines



Productivity and sustainability of
family agriculture for food
security and the rural economy

David Dolly and Glenroy Ennis

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and Saint Vincent and the Grenadines**

**David Dolly and Glenroy Ennis
Edited by Shamin Renwick**

Inter-American Institute for Cooperation on Agriculture (IICA), 2017



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Foreword

As the specialised agency of the Inter-American System for agricultural and rural development, the Inter-American Institute for Cooperation on Agriculture (IICA) focuses on making agriculture competitive, inclusive and sustainable in its 34 member states. The Institute delivers its technical cooperation through four instruments, namely, *Rapid Response Actions (RRA)*, to respond in a timely manner to demands of a country or region due to political, economic and social changes, environmental emergencies or other emerging situations; *Technical Cooperation Fund (FonTC)*, to finance pre-investments initiatives and formulate projects aimed at external resources; *Externally Funded Projects*, to complement and expand IICA's technical and financial capacities through alliances with other international organisations and agencies; and *Four Flagship Projects*, which integrate the technical cooperation and provide a framework to achieve institutional contributions. Agricultural Health and Food Safety (AHFS) is a cross-cutting thematic area for the Flagship Projects and other technical cooperation instruments.

IICA acknowledges the strategic importance of family farming for its active role in the integrated and sustainable development of rural territories as well as the achievement of food and nutrition security in IICA's member countries. Accordingly, one of the four Flagship Projects, the Productivity and Sustainability of Family Agriculture for Food Security and Rural Economy (PIAF)¹, places considerable effort to discern, identify, and establish the true value of family farming in the hemisphere. It highlights the diversity and characteristics of family farming, with a view to positioning the subsector as a focus of public policies, taking into account contemporary aspects of rurality and territories. In the Caribbean region, the social dynamics and production systems of family farming have undergone a different pattern of development from the rest of Latin America. Thus, with the aim of contributing to a better understanding of the rurality in the Caribbean, PIAF has opted to support the present characterisation study. In doing so, IICA expects that this research will promote the design of differentiated public policies by strengthening institutional frameworks to meet new challenges, as well as to encourage innovative extension processes and creative enterprises based on the sustainable management of productive resources and differentiated commercial integration for family farming.

In order to advance an approach to the diversity of the small family production in rural areas in the Caribbean, the dynamics of four countries of reference were taken as case studies, to identify certain characteristics, specificities and socio-economic attributes in four zones of the Caribbean Region. Thus, this study on Characterisation of Family Agriculture covers the countries of Guyana (a mainland territory), Haiti (due to its unique socio-economic situation), Jamaica (a large Greater Antilles territory), and St. Vincent and the Grenadines (a small Lesser Antilles territory), addressing each of two key issues: the characteristics of family farms in the country and the stakeholder perspectives of family farms.

1. PIAF, Spanish acronym for Proyecto Insignia "Productividad y sustentabilidad de la agricultura familiar para la seguridad alimentaria y la economía rural"

The study was conducted with the support of researchers from the University of West Indies, Dr. David Dolly and Mr. Glenroy Ennis, who traveled to each of the countries to carry out the interviews and field visits, with the support of the IICA representatives in the selected countries. The Institute appreciates the professionalism of the researchers involved and their dedication to the conduct of this research and advises that the comments and opinions expressed in the document are those of the researchers and do not necessarily represent the position of the Institute on the subject.

The publication of this document seeks to promote a critical analysis of the conditions of family agriculture in Caribbean countries; a reflection on possible scenarios that allow its strengthening and sustainable development; and a debate on the design and implementation of public policies that can generate the conditions so that these scenarios become successful and sustainable realities

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There were many who worked tirelessly in various capacities as they provided valuable contributions to complete the assignment. Special mention must be made of the respective country representatives namely Mr Michael Dalton – Saint Vincent and the Grenadines, Dr Elizabeth Johnson - Jamaica, Mr Wilmott Garnet – Guyana, and Dr Abimola Abiola - Haiti. While collecting data in the field in Haiti, Mr Eddy Lebelon, served as an excellent interpreter and guide. Likewise, Mr Jermaine Joseph and Mr Arnold De Mendonca did a great job in Guyana. Ms Shauna Brandon and Mr Ainsworth Riley provided similar services in Jamaica. In Saint Vincent and the Grenadines, staff of the Government Extension Service provided good facilitation. Yet, there were many other IICA staff members who ably assisted. Indeed, they are too numerous to mention, but we are sure that they know who they are and their efforts are sincerely appreciated.

To the family farmers from all the countries, your warm welcome was well received. We felt at ease discussing with you the core element of interest regarding characterisation. You were all honest, patient, and dedicated which augurs well with food security goals of the region. It is hoped that the efforts you made to supply all the information requested would bear fruit in new policy perspectives for family farming in the region. To the many selected stakeholders who were always willing to share their knowledge and expertise about matters related to rural and agricultural development in the respective countries, we say an equally hearty thank you. These persons were very vocal, open, and resourceful, at all times.

Ms Tracy James provided the Statistical Package for Social Sciences (SPSS) analysis at fairly short notice. This is commendable and must not go unnoticed.

Finally, to the editor, Mrs Shamin Renwick, who worked alongside the authors and ensured the impeccable quality finish that this study has produced, we say a special thanks.

Here is hoping that readers find the study useful and capable of helping to produce improved livelihoods for family farming in the Caribbean region.

List of Acronyms

ACP	African, Caribbean and Pacific
AHFS	Agricultural Health and Food Safety Program
CaFAN	Caribbean Farmers Network
CAO	Chief Agricultural Officer
CARICOM	Caribbean Community
CARIFORUM	Caribbean Forum
CI	Conservation International
CTA	Technical Centre for Agricultural and Rural Cooperation
CWA	Caribbean Week of Agriculture
DCAO	Deputy Chief Agricultural Officer
DFF	Diversified Family Farming
EU	European Union
FAO	Food and Agricultural Organization of the United Nations
FF	Family Farming
FFP	Family Farming Plan
FFS	Farmer Field School
FonTC	Technical Cooperation Fund
FP	Flagship Project
GAP	Good Agricultural Practices
GDP	Gross Domestic Product
GLDA	Guyana Livestock Development Authority
GMC	Guyana Marketing Corporation
GSA	Guyana School of Agriculture
ICTs	Information and Communication Technology
IFAD	International Fund for Agricultural Development
IICA	Inter-American Institute for Cooperation on Agriculture
IPED	Institute of Private Enterprise Development
IYFF	International Year of Family Farming
Ja REEACH	Jamaica Rural Economy and Ecosystems Adapting to Climate Change
JAS	Jamaica Agricultural Society
JSIF	Jamaica Social Investment Fund
KMCRG	Kanaco Mountain Community Representative Group

MAFFRT	Ministry of Agriculture, Forestry, Fisheries and Rural Transformation
MARNDR	Ministry of Agriculture, Natural Resources and Rural Development
MAH	Multi-Activity Households
MERCOSUR	Mercado Común del Sur/Southern Common Market
MOA	Ministry of Agriculture
NAMDEVCO	National Agricultural Marketing and Development Corporation
NAREI	National Research and Extension Institute
NGOs	Non-Governmental Organisations
OAFM	Organic Agro-Tourism Farm Market
OFAR	On Farm Adaptive Research
PEST	Political, Economic, Social and Technological
PIAF	Productividad y Sustentabilidad de la Agricultura Familiar para la Seguridad Alimentaria y la Economía Rural /Productivity and Sustainability of Family Agriculture
RADA	Rural Agricultural Development Authority
READ	Rural Enterprise and Agricultural Development
REAF	Reunión Especializada en Agricultura Familiar/Specialized Meeting on Family Farming
REDI	Rural Economic Development Initiative
RRA	Rapid Response Actions
SEA	Strategic Environmental Assessment
SFF	Specialised Family Farming
SPSS	Statistical Package for Social Sciences
SSOS	Society for Sustainable Operation Strategies
SVG	Saint Vincent and the Grenadines
USAID	United States Agency for International Development
WADNET	Women Agricultural Diversification Network
WDAA	West Demerara Agricultural Association
WINFA	Windward Island Farmers Association
WUSC	World University Service of Canada
WWAG	Wowetta Women's Agro-processing Group
WWFCDC	West Watooka Farmers Civil Development Council

Executive Summary



Family farm in Jamaica. Photo: IICA, 2016.

This document reports on a family farm investigation on behalf of the Inter-American Institute for Cooperation in Agriculture (IICA). The methodology utilised involved a desk study, which commenced in 2015 and reviewed the literature, mainly, from the Caribbean and Latin America; and a field study which interacted with farmers and stakeholders, all of whom were selected by IICA country offices. The field study was undertaken in 2016, with 13 farmers in Saint Vincent and the Grenadines and 8 in Jamaica in January; and 18 and 12 farmers in Guyana and Haiti, respectively, in July. The study engaged the selected farmers and stakeholders as key informants on the premise that, with their vested interest and experience, they could help provide a first-hand understanding of family farms in the Caribbean.

The farms in Jamaica represented 'larger' agricultural operations which may exist. They were more longstanding in their history and, in some ways, they depict a more direct link with the plantation economies which once existed within the Caribbean region. Those from Guyana, Haiti, and Saint Vincent and the Grenadines represented 'smaller' agricultural operations. In Guyana, there was the additional perspective of hearing from farm families who were of indigenous origin. All operations patterned the outcomes of recent and numerous attempts by Caribbean governments to develop an agricultural unit which could increase food production in the region. These farms produced a mix of crops and livestock. However, crop enterprises seemed to dominate the farming systems of the smaller farms. In the crop-based farming systems, livestock production usually provides a protein source or may serve as a 'bank' in times of financial need. Stakeholder discussions complemented an understanding of the farms designated as family farms.

Family farms spanned one generation or more. Usually, the head of the family farm developed an interest from their own parent, grandparent, older sibling or some other close relative. The farms rely on family labour but may still employ ad-

ditional labour at specific times, e.g., at harvesting, land preparation or some special operational activity which might require extra labour. Family farms can be described as large, medium or small and the dimension of these categories varied relative to the size of the country. There is also a 'new entrant' category of family farm which has the support of the family in the beginning of a new agricultural investment on family lands.

Family members rely on the farm for contributions to their livelihoods and food and nutrition security. Even though some members may not live on the farm, they contribute to the farm in some ways and they expect to be part of the farm's fabric. There is a sense of pride, empowerment, and a love for agriculture in being part of a family farm. The farm bonds family traditions and build the family's confidence.

Family decisions tend to guide the family farm and these decisions perpetuate the farming system which exists. Most farm leadership also influences community activities regarding religion, politics, special projects and possible farm groups. With regard to state governance, the farms are guided by state laws regarding agricultural holdings. However, most family farms have secure tenure arrangements be it as freehold property or lease arrangements. While the State, occasionally, and non-governmental organisations (NGOs), more rarely, offer benefits, such as incentives, grants, and subsidies, to agriculture, family farms seem less dependent on this type of support.

The aging script of leaders of agricultural holdings becomes somewhat neutralised by family farm governance. Family farms are better able to provide a younger member who can carry on farm leadership. These farms also invest in educating their members and this, in turn, contributes to future leadership.

It is possible to direct specific policies towards family farms. The desk study was able to draw on many issues regarding the survival of family farms in other parts of the globe. It can be summarised that the uniqueness of family farms warrants a special strategic policy development framework if they are to be sustained in today's agricultural environment. This necessitates more recognition by governments and NGOs in setting them apart from other types of farms.

A key and immediate recommendation is the inclusion of family farm data in future agricultural censuses within the Caribbean. Developers and policy makers should effectively synchronise developmental initiatives with the culture of the farm family to ensure that the intended development captures the norms and values of the FF system. Efforts should be made to identify strategies that will include the family unit at every stage of the developmental process and to identify adaptable strategies.

1. Introduction



Family farming (FF) is a socio-productive category that plays a key role in a wide variety of socio-economic activities as well as political, institutional, and cultural functions that are essential for the development of rural spaces. In Latin America and the Caribbean, some 80% of productive units fall into the family farms category, employing more than 60 million people (IICA, 2016). As a result, FF can be considered the main source of agricultural employment and food security. Moreover, FF through its emphasis on natural farming methods plays a key role in ensuring the sustainability of the environment and the conservation of biodiversity.

In contrast to Latin America, the social dynamics and production systems of FF in the Caribbean region have generally undergone a different pattern of development due to their historical and cultural background. Therefore, understanding this origin and relationship between family farms and territories in the Caribbean is crucial for the development of strategies that will bring about changes in the living conditions of rural populations. A better understanding of family farms in the Caribbean, through characterisation field studies, can help focus on specific policies which support and sustain this type of agricultural occupation. Consequently, family farms can more adequately contribute to the region's food and nutrition security and to the rural economies of the Caribbean.

The International Year of Family Farming (IYFF) (<http://www.fao.org/family-farming-2014/en>) declared in 2014 by United Nations General Assembly (UN 2011) and the Food and Agriculture Organization of the United Nations (Chance 2014; FAO 2013; 2014a) raised the profile of FF and smallholder farming at the global level, repositioning FF at the centre of agricultural, environmental, and social policies in the national agendas by identifying gaps and opportunities to promote a shift towards more balanced development. It is against this background that IICA decided to make FF one of the strategic initiatives of its technical cooperation agenda in its 2014-2018 Medium-Term Plan (MTP), recognising family farms' strategic importance for the integrated and sustainable development of rural territories and the achieve-

ment of food and nutrition security in IICA's member countries². In recognition of the importance of family agriculture, IICA, through its Productivity and Sustainability of Family Agriculture Flagship Project (PIAF), assists in positioning member countries to promote a new generation of differentiated public policies for family farms, and includes actions to promote innovation to strengthen the links between small-scale and family farmers and agricultural chains, as well as the participation of women and youth in agriculture and succession planning for future generations.

Although agriculture is viewed as one of the economic sectors that can strengthen the integration process (through intra-regional trade and enhanced food and nutrition security) and mitigate adverse social, economic and environmental impacts of climate change in the IICA member states in the Caribbean; very little or no attention has been paid to understanding and supporting family farms in the region. Caribbean farmers who attended an FAO Conference in Santiago, Chile in 2014, highlighted four critical areas for consideration when it comes to family farms in the Caribbean Community (CARICOM) region, namely: (a) lack of an institutional framework designed to guide the development of FF, (b) lack of appreciation and the undervaluing of the contribution of FF by society and government, (c) weak and uncoordinated economic, technological, social, and environmental policies supporting family farm development, and (d) lack of public policies to encourage youth and women to remain and work in rural areas (FAO 2014b).

The Caribbean Farmers Network (CaFAN), an organisation which represents the region's small farmers since 2004, is a regional network of farmers' associations and NGOs in the Caribbean. CaFAN has not defined a specific difference between small farmers and family farmers. As CaFAN advocates more specifically for the traditional small farmer in the Caribbean region, then a special category of farmer i.e., the family farmer, must be discerned (CaFAN 2011). Thus, there is, presently, a misunderstanding which sometimes leads to an inability to distinguish the family farmer from other producers in the Caribbean. This is especially so since many groups may have similar challenges, for example, praedial larceny; difficult land tenure arrangements; the gender issue; a failure to attract youth to agricultural livelihoods and, often, a lack of finance. This is quite like the original difficulty which had existed in gender mainstreaming which could help the region's female producers. To some reasonable extent, the challenge of incorporating the gender issue is being overcome. It, therefore, becomes important to discern the differences between all other types of farms and the specifics of family farms from the early onset of this account in order to recommend appropriate policies.

Family farms in the Caribbean region do not readily fit a template and exist in the different social and economic contexts of the Caribbean. This difficulty is further exacerbated by the lack of agricultural census data which is less linked to family structure and income and more to farm size and crops.

² The Caribbean territories that IICA works with have their own unique Caribbean identity and includes Antigua and Barbuda, The Bahamas, Barbados, Belize, Dominica, Dominican Republic, Grenada, Guyana, Haiti, Jamaica, Saint Kitts/Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname and Trinidad and Tobago. These countries share a common history and most are English-speaking. While Haiti is French-speaking and Dominican Republic is Spanish-speaking, in Belize, alongside English, there are local languages of Mayan extract and, in Suriname, derivatives of the Dutch language is spoken as well. Some countries have indigenous populations of original peoples who once lived there exclusively.

To address the complexity of the challenge, this study provides an account of the characterisation of family farms within the Caribbean region as exemplified by a literature review; field studies in four Caribbean territories; and a synthesis of relevant information which emerged. The selected countries were considered a representative cross-section of Caribbean states, i.e., a small island (Saint Vincent and the Grenadines); a large island (Jamaica); a mainland territory (Guyana); and a unique Caribbean economy (Haiti). The field study, conducted in 2016, involved interaction with selected farmers and stakeholders from relevant institutions in the respective countries. In January, the authors engaged with 13 farmers in Saint Vincent and the Grenadines and 8 in Jamaica and, then in July, with 18 and 12 farmers in Haiti and Guyana, respectively. At the end of the study, definitions for family farms and recommendations for policy development are provided.

With regard to policy recommendations, it is suggested to link them to family ownership, succession planning, and (farming) commitment. It is important to consider multiple and differentiated markets and demand points e.g., replacement of imports, organic agricultural production, tourism, high value agricultural production, and production for the (West Indian) diaspora. There is also the need for (continued) consumption and nutrition policy approaches which encourage families in the Caribbean to eat and drink locally. Finally, there should be an integration of social and economic planning which promotes simultaneous policies for health, education, and agriculture.

2. Methodology

This qualitative study will describe FF through specific lenses and with a specific methodology as follows:

1. An account of relevant literature from the Caribbean, Latin America and elsewhere in a desk study.
2. A field study as follows:
 - 2.1 Interviews held at selected family farms within Guyana, Haiti, Jamaica, and Saint Vincent and the Grenadines
 - 2.2 A focus group exercise and other discussions among selected stakeholders in Guyana, Haiti, Jamaica, and Saint Vincent and the Grenadines
 - 2.3 A synthesis analysis based on the study findings to define family farms, make policy directives and recommendations

2.1 Desk Study

The desk study, conducted in December 2015, explored the concept of FF and related concerns through a literature review. The review surveyed several sets of readings which covered various aspects of farming in the Caribbean in order to provide possible insights into FF. Firstly, an account of agricultural censuses within selected countries of the Caribbean region was undertaken. This was an important first step in order to understand the notion of small farming within these countries. Unfortunately, the region does not have a consistent approach to agricultural censuses as recommended by the FAO. From observations over the years, there is the suggestion that these censuses be held every ten years. Such a routine can gauge a country's agricultural capacity and understand the pulse of its agricultural



Family farmer speaks with author in Linden, Guyana. Photo: David Dolly, 2016.

development. In the absence of this data collection process, it is difficult to determine some of the trends which are occurring. There are reasons for the non-conduct of censuses as routinely as expected. For example, there might be fiscal constraints regarding finances even though the FAO provides a measure of support for these activities. Additionally, there are also no consistently parallel enquiries from country to country. Much depends on the decisions within a local management body which conducts the census and the conclusions that body makes when it comes to the type of data needed in that country.

Another feature of these censuses is that, while they represent agricultural productive capacity, this may not be a true reflection of the actual ongoing front-line production activity. For instance, the most 'recent' agricultural census from Trinidad and Tobago revealed that there were 19,111 holdings (Trinidad and Tobago 2004). Given the decline in agricultural activity in the country, one may extrapolate a drop in the number of active producers by 2015, possibly by 50%. However, when National Agricultural Marketing and Development Corporation (NAMDEVCO), conducted an enquiry in 2015, it was revealed that the active population of producers was a mere 5,111 (Ali 2015). These results were gleaned from a survey of registered farmers throughout the country's extension districts. Registered farmers more easily tell a truer perspective of agricultural capacity. Hence, using the census data only serves as a guide to possible occurrences. Nevertheless, this study chose to investigate the most recent census results from the respective countries as a starting point. The data could reveal some relevant conclusions.



Conducting an interview with head of household in Haiti. Photo: David Dolly, 2016.

The desk study also examined several studies in Latin America as different from Latin America and the Caribbean. This aspect of the research mainly covered recent work by Márquez and Ramos (2013) reviewing a study of the MERCOSUR (Common Market of the South) Group from Latin America; van der Ploeg (2013); and Schneider (2014; 2016), on the topic of family agriculture and policy as it relates to family farms in several countries within Latin America.

The review then reflected on the reports and discussions of a Technical Centre for Agricultural and Rural Cooperation (CTA) online debate among youths (between the ages of 19-35 years) who discussed the role of youth in sustaining FF through ICTs. Youths from the African, Caribbean, and Pacific countries participated in the event. The debate was held during the period 22 September – 3 October 2014 (AYF and CTA 2015).

The review also analysed aspects of a report of an online European discussion among public citizens in Europe on the topic of FF in Europe (European Commission 2013). Finally, there was reference to aspects of discussions on family social structure in the Caribbean (Seegobin 2003).

2.2 Field Study

The field study utilised qualitative methods to survey 13 farms in Saint Vincent and the Grenadines and 8 in Jamaica in January 2016; as well as 18 farms in Guyana and 12 in Haiti in July 2016. Even though the family farm was not yet precisely defined for the Caribbean, the selected farms were deemed family farms based on their operations and the familiarity which selectors had with them.

2.2.1 Selected Farmers

Using purposive sampling in a cross-sectional research design, the sample farms were selected by the local offices of IICA, which had collaborated with relevant organisations, such as the agricultural extension services, local farmers' organisations, and local NGOs. Therefore, the perception of a family farm before this study was undertaken was that of the IICA officers. The selections served as key informants to represent a range of FF situations with the objective to capture the highlights of such farming systems within the four countries.

A questionnaire was designed to guide the interrogation of these key informants in face-to-face interviews. See annex XI. The instrument consisted of open- and closed-ended questions related to farming livelihoods, and sociological and other relevant information which could assist in determining the nature of family farms as seen through the lenses which have been developed. Even so, the farmers often provided additional information which was recorded. Answering the questions took approximately one hour and the entire visit lasted, in general, about 75 minutes. There were opportunities to observe each farm, its field layout, technologies employed, and related and relevant facts as the farmers were involved in a range of production systems. Descriptive analysis was conducted using Statistical Package for Social Sciences (SPSS) v.21.

The 18 farms in Guyana were spread across different parts of the country and were of two types. There were 11 farms which belonged to the indigenous communities of Amerindian origin consisting of three sets of farms: Two sets were from the Rupununi area nearer to Lethem and the third set was from east of the Demerara river. The remaining seven were typical of the rest of the Caribbean where the heritage was that of occupation by ex-members of the plantation economy. Of these, there were four from the east coast area in Maicoahny and three farms from outside the second largest town of Linden. In Haiti, farmers were from three rural agricultural communities within two hours of driving from the capital Port-au-Prince. In Jamaica, the farms were located in five parishes which represented a wide cross section of the island where major agricultural activities were carried out. The farms were located throughout extension districts in Saint Vincent and the Grenadines.

The survey data was captured in the presence of IICA personnel. In Guyana and Haiti, the researchers visited the designated areas and interviewed the respondents. In Haiti, the researchers used interpreters as the farm respondents communicated in a local creole patois. In Jamaica, the researcher was the technical person who led the discussions with the farm family. In most instances, several family members who were actively engaged in the activities of the farms participated in the discussions. In the case of Saint Vincent and the Grenadines, the respective district extension agents also presided while the interviews were conducted.

2.2.2 Selected Stakeholders

Stakeholders within the agriculture sector in the four countries under review were selected by the respective IICA country offices. There is a list of questions in annex XII which guided discussions with all stakeholders. All responses were recorded on tape and later transcribed and interpreted.

In Guyana, the stakeholders were assembled at a morning workshop which discussed the issues related to FF. The workshop, organised by IICA, was conducted in a 2-hour session. There were representatives from a cross-section of personnel involved in the conduct and leadership of Guyana's agriculture. Stakeholder representatives came from the following organisations: The 100% Organic Agro-Tourism Farm Market (OAFM); FAO, Guyana; Guyana Livestock Development Authority (GLDA); Guyana Marketing Corporation (GMC); IICA, local agricultural consultants; Mocha Block B Farmers Association; National Research and Extension Institute (NAREI); Partners of the Americas (Guyana Chapter); Rich Milk Dairy Enterprise; West Demerara Agricultural Association (WDAA); and World University Service Canada (WUSC).

In Haiti, the stakeholders were two senior members of the state-run services for agriculture, namely the Director of the Cabinet of the Ministry of Agriculture, Natural Resources and Rural Development (MARNDR) and the Head, Innovation, Training, Research and Extension of MARNDR.

In Jamaica, the selected stakeholders were categorised into two groups, namely, Government and NGOs. The Ministry of Agriculture represented the Government organisa-

tions. In attendance on behalf of the Ministry of Agriculture were the Principal Director, Policy and Planning; the Director of Data Bank; the Policy Administrator of the Ministry of Agriculture; and two Agricultural Economists. Efforts were made to have direct representation from the Rural Agricultural Development Authority (RADA), Jamaica's state organisation for agricultural extension. Nevertheless, it was eventually represented indirectly. A focus group discussion was conducted with all five informants who were selected from the various departments within the Ministry. The four NGOs that participated were the Rural Development Specialist and Agribusiness Specialist, IICA Jamaica; a Project Manager and a Project Officer, Jamaica Social Investment Fund (JSIF); three programme advisors from the Jamaica Rural Economy and Ecosystems Adapting to Climate Change (Ja REEACH); and the local FAO country representative. Each of these agencies was interviewed in separate focus group exercises, with the IICA representatives taking part electronically via Skype and email. The format used for the discussions was one where the respondents were prompted to continue talking about FF systems in Jamaica in order to focus the conversations on the issue of characterising FF in Jamaica.

In Saint Vincent and the Grenadines, there were three sets of stakeholder discussions. There was, firstly, a discussion with a State representative: the Permanent Secretary of the Ministry of Agriculture, Forestry, Fisheries and Rural Transformation (MAFFRT). He outlined current initiatives of the agriculture programmes as directed by the State. Secondly, there was a main focus group discussion with representatives of various state and non-state organisations: the Government Extension Services and the Veterinary Services; The Beekeepers Association of Saint Vincent and the Grenadines; The Network of Rural Women Producers; The Small Ruminant Society of Saint Vincent and the Grenadines; The Windward Island Farmers Association (WINFA); and The Women in Agriculture for Rural Development. The 3-hour discussion, during which respondents shared their views candidly, was carefully recorded. Finally, there were discussions with the Chief Agricultural Officer (CAO) and the Deputy Chief Agricultural Officer (DCAO) in a separate meeting.

2.2.3 Synthesis Analysis

The synthesis analysis represented an amalgamation of the important elements which emanated from the study. The intention was to provide a clear and concise picture of the current discussions pertaining to the characterisation of FF within the Caribbean. The three elements of this amalgamation were as follows: defining family farms; possible policy directives; and recommendations. These discussions are presented in the respective sections 5, 6 and 7 of the document.

In Section 5, a definition for the family farm from a Caribbean perspective emerges from the study. This is presented alongside definitions from Latin America and development agencies. Section 6 provides a discussion on policy directives. With respect to the policy analysis, the synthesis used, in part, a PEST analysis (one of the most commonly used analytical tools for assessing external macro-economic factors related to a particular situation (PESTLE Analysis 2013)). The acronym PEST means Political, Economic, Social and Technological factors (ICMBA 2010). The PEST analysis is described as a business measurement tool that shows the position,

potential and direction for a business. It is considered to be a part of the external analysis when conducting a strategic analysis and provides an overview of the different macro environmental factors that the industry has to take into consideration (Chapman 2017). For instance, it provides an understanding of market growth or decline, business position, potential and direction for the operation. Studies showed that besides the internal resources of any business unit and industry factors, there are several other macro-economic factors that can have a profound impact on the performance of a company. All these factors need to be carefully analysed in order to determine the significance of their impact on the performance of the business. See section 6.1.

Within the context of this study, the PEST analysis is essentially an assessment of the four previously mentioned external elements in relation to the situation with the FF system in the long term. It will ultimately provide an understanding of the larger global environment within which the FF system operates. The PEST analysis will facilitate not only the discovery of the strengths of the business in the current environment, but also the weakness of competitors, identify new markets, potential customers and emerging technological platforms and devices that can help propel the farming system. Therefore, the PEST analysis should help to drive the formulation and implementation of policy directions based on an understanding of the internal and external environments in which such a farming system will function. It must be viewed as an ongoing process which needs constant refining based on changes in the business environment. An additional matrix analysis was carried out and designed to begin to provide recommendations for the study. The results of both these assessments with regard to the family farm as an economic unit are presented in Section 6. Section 7 makes recommendations based on the synthesis analysis, matrix analysis and salient conclusions which emerged from the study.

3. Desk Study

3.1 Caribbean Review

The desk study, firstly, investigated the most recently available agricultural censuses of several countries within the region, namely: Barbados (1989), Dominica (1995), Jamaica (2007), Saint Kitts/Nevis (2000), Saint Vincent and the Grenadines (2000) and Trinidad and Tobago (2004). There is also a reflection of an FAO account of an agricultural census which was done in Haiti in 2012.

None of these agricultural census data sets have specific information regarding family farms. This assessment, however, elucidated certain trends which may indicate some FF circumstances. What will therefore be discussed here will be the following: percentage of farms that are less than 10 hectares; percentage of farms that are operated by individuals versus corporations; and the age ranges of producers in each country. Bearing in mind that the data mainly spans a single year per country over the period 1989-2007, the discussions can only serve as a guide.

3.1.1 Farms in the Caribbean That Are Less than Ten Hectares

It is a fact that the majority of farms within the region are small in size and less than 10 hectares. There are always on-going discussions regarding the nature of small farms and the farmers who manage them. As indicated earlier, there is the questionable conclusion that these farms are all family farms. In fact, some authors



Water collection tank of organic family farmer in Saint Vincent and the Grenadines. Photo: David Dolly, 2016.

speak to all small farms as family farms. One may wish to decide that a percentage of small farms are family farms, but it is incorrect to conclude that all small farms are family farms. Indeed, there are also family farms which belong to medium- and large-size categories. The small farm concept in the Caribbean relates to a way of life within the agricultural sector. It may be characterised by dependency on the State; the use of a rain-fed approach for cultivation; crop farming systems; the use of large quantities of herbicides, pesticides and fertilizers; an uncoordinated marketing system which perpetuates a 'small farming culture'; and, lately, a chaotic reliance on limited available labour. These farms are invariably less than 10 hectares. The census data revealed that the majority of these farms in four of the six countries are less than 10 hectares.

In Jamaica, less than 50% of the farms are less than 10 hectares, but coupled with the other descriptors which have been mentioned, it is quite possible that several farms over 10 hectares can be considered small farms. Jamaica has a relatively larger land mass and land settlement patterns provided larger spaces for farming among the rural population. Hence, there are small farms above 10 hectares. Table 1 shows the percentage of farms which are less than 10 hectares in the six countries.

Table 1: Farms that are less than ten hectares

Country (Census year)	% Farms(< 10 ha)
Barbados (1989) ^a	71
Dominica (2000) ^b	97
Jamaica (2007) ^c	47
Saint Kitts and Nevis (2000) ^d	Not Available
Saint Vincent and the Grenadines (2000) ^e	99
Trinidad and Tobago (2004) ^f	96

Source: ^aBarbados (1992); ^bDominica (1995); ^cJamaica. SIJ 2007; ^dSaint Kitts and Nevis (2000); ^eSaint Vincent and the Grenadines (2000); ^fTrinidad and Tobago. CSO (2004).

From the data in table 1, it can be concluded that the majority of family farms may be small in size, but there is no indication of the exact percentage. A first recommendation from this study is that the region needs to conduct surveys of family farms.

3.1.2 Farms Operated by Individuals versus Those Operated by Corporations

Most of the farms in the census population were operated by individuals rather than corporations. Table 2 illustrates the number of farms which are individually owned and corporation owned in 6 Caribbean territories.

Table 2: Individually-owned and corporation-owned farms

Country (Census year)	Individually-owned	Corporation-owned
Barbados (1989) ^a	16,945	103
Dominica (1995) ^b	8,365	7
Jamaica (2007) ^c	210,853	18,100
Saint Kitts and Nevis (2000) ^d	2,934	110
Saint Vincent and the Grenadines (2000) ^e	7,353	11
Trinidad and Tobago (2004) ^f	18,591	36 ¹

Source: ^aBarbados (1992); ^bDominica (1995); ^cJamaica. SIJ 2007; ^dSaint Kitts and Nevis (2000); ^eSaint Vincent and the Grenadines (2000); ^fTrinidad and Tobago. CSO (2004).

Note: 1 Since 2004, these figures for Trinidad and Tobago have changed since the major state corporation had distributed lands to small farmers and there has been investment by corporations.

Table 2 indicates that, in all countries, corporations owned less than 1% of the farms. Hence, there is the potential that family farms do exist as reported by the data.

3.1.3 Age Groups of Farm Owners

Jethro Greene, Chief Coordinator of Caribbean Farmers Network (CaFAN) has said that the farming population in the Caribbean is an aging one (quoted in Renwick 2010). This has consequences for sustaining the productivity of the region's agricultural sector. Table 3 illustrates the age groups of farmers in six Caribbean countries.

Table 3: Age groups of farm owners

Country (Census year)	Under 35 years		35-65 Years		Over 65 Years	
	No. of Farms	%	No. of Farms	%	No. of Farms	%
Barbados (1989) ^a	2,099	12.64	9,355	56.34	5,150	31.02
Dominica (1995) ^b	18,278	62.05	9,243	31.38	1,937	6.57
Jamaica (2007) ^c	41,226	19.85	128,590	61.86	38,037	18.30
Saint Kitts and Nevis (2000) ^d	572	18.90	1,800	59.48	654	21.61
Saint Vincent and the Grenadines (2000) ^e	1,365	18.46	4,897	66.21	1,134	15.33
Trinidad and Tobago (2004) ^f	2,458	12.86	13,840	72.42	2,813	14.72

Source: ^aBarbados (1992); ^bDominica (1995); ^cJamaica. SIJ 2007; ^dSaint Kitts and Nevis (2000); ^eSaint Vincent and the Grenadines (2000); ^fTrinidad and Tobago. CSO (2004).

However, this census data has revealed that there are sizeable populations of active ownership by householders in the 35-65-year-old category. For the island of Dominica, there is a young population of producers according to its agricultural census of 1995. Again, a detailed investigation into the region's family farms would reveal the composition of age groups of the owners of these farms and the likelihood of sustained productivity according to age ranges.

3.1.4 Haitian Agriculture



Hillside farming in Haiti. Photo: David Dolly, 2016.

Jara and Muñoz (2014) revealed an analysis of a recent census in Haiti where 25% of Gross Domestic Product (GDP) depends on agriculture and 50% of the country's food supplies are produced domestically. They referred to the General Agricultural Census of 2012, stating that of the 1,018,951 farms in Haiti, 94% are small farms with less than three hectares of land. Of these, 44% are less than half of a hectare. According to the article, they are mainly family farms where FF traditions exist. The main crops produced in Haiti are cane sugar, cassava, maize, and yam. Regarding the producers, 52% are aged between 35 and 54 years and they have an average age of 49 years. Three-quarters of the farming population are men. There are 52% of farmers without formal education and most (90%) of these are on family farms. Most (80%) of these family farmers are landowners.

Generally, Jara and Muñoz (2014) attributed a designation called 'the family farm' without being specific with regard to what criteria qualified a farm to be a family farm. In so doing, they made the point that 90% of the country's 1,018,951 farms

are family farms. These farms occupied 89% of the country's total land area. Also, family farms occupied 58% of the land area that provided food for market. Farmers without formal education managed 52% of the total area under cultivation. Some 90% (47.5% of the total area) of these were family farmers. With regard to livestock production, main farming activities were hens (poultry) (37%) and pigs (33%). Very few of these livestock farms (28%) exceeded an income of US\$1,200 per year.

According to State policy of the MARNDR, physical attributes of the farming location and institutional support available to foster sustainable development of agriculture and, by extension, FF in Haiti, include:

- Availability of water and irrigated land; diversity of agro-ecological environment; proximity to fishing coast, and thus regional markets and North America
- Government's 3-year plan to promote institutional strengthening and governance of the agricultural sector; family farmers' support programs; strengthening commercial agriculture; infrastructural development
- Farmers' registry, emphasizing environmental conservation, production systems, and socio-economic situation; provision of subsidy for agricultural inputs; expansion of the Farmer Field School (FFS) to promote technical support and good agricultural practices
- FAO's support for family farmers to increase direct investment and training in dairy

This account did not define the family farm.

3.1.5 Early Conclusions

In conclusion, the following characteristics can be deduced as being attributes of a family farm:

- mainly small in size;
- have FF traditions;
- may have secure land tenure, but could still be without; produces a range of crop and livestock commodities bearing in mind their suitability to local farming systems;
- managed by either men or women.

When one considers accompanying state policy, Caribbean countries would need to align their policies with the definition they wish to adopt as it is difficult to choose a 'one-size-fits-all' definition of family farms.

With respect to the conclusions from the review, the first resolve pertains to separating the small farm from the family farm. There is the obvious subsuming of the features of the family farmer within those of the small farmer. While this is understandable, this approach is unable to discern the types of policies which benefit and support the family farmers' contribution to agricultural development and productivity within the region. Finally, one has to include other types of family farms which may be medium-scale or large-scale.

3.2 Latin American Review

3.2.1 The Resurgence of Family Farming from a Latin American Perspective

A process of discussion and analysis of the role and place of FF in the social and economic development of countries in the Latin America and the Caribbean started in Brazil in the mid-1990s and has evolved to be disseminated from the early 2000s to other countries in the region. According to Estrada's (2006) report of a seminar of experts and farmers in Latin America which was organised by FAO in the Chilean capital, family farms are not disappearing in Latin America, but are becoming more vulnerable, requiring government policies to ensure their economic and social inclusion.

Regional initiatives such as the creation of the Specialised Meeting on Family Farming (REAF) in 2004 among MERCOSUR member countries and, more recently, initiatives taken in Central America with an emphasis on the Family Farming Plan (FAP) of El Salvador have been important in conceptualising FF and its meaning (Schneider 2016).

A second reason for resurgence relates to the issues of food. Consideration is given to the role of smallholder production in the context of climate change and demographic transition. Consequently, smallholders will need to make a significant contribution in helping to feed the world's 9 billion people.

Thirdly, is the emerging importance of territorial approach in Latin America since the 2000s. There is an important interest in territories and FF in driving diversification by providing manpower to the non-agricultural sector, thereby pushing up demand for goods and services. Thus, FF has brought about renewed perspectives on the role of the actors and social movements. Currently, the concept of the family farm is in widespread use in several Latin American countries.

3.2.2 Schneider's Viewpoint

Schneider (2014) cited the following as important considerations in establishing the importance of FF today as a worthwhile economic activity:

- The role of agriculture in the reproduction of the FF system
- The heterogeneous and diversified nature of family farms
- Income partially comes from non-agricultural activity as well

He claimed that variation may occur in attempting to define FF due to differences in perspectives and purpose. He advanced three approaches that may be considered when determining definition.

1. A theoretical frame of reference which focuses on representing, heuristically, what is to be included and excluded from the definition adopted.
2. A normative approach which utilises classification or empirical measures (e.g., availability of land, income levels, and degree of specialisation). However, this approach may lead to arbitrariness or discriminations.

3. A political approach which adopts a definition that is constructed on a social basis.

The persistent nature of family farms has influenced a change in the conversation about them from the mere issues of efficiency and effectiveness to greater understanding of those attributes that make smallholders and family farms so resilient within an increasingly capitalist dynamics of the agro-industrial chain.

There is consensus among policymakers, researchers, and other stakeholders that family farmers are not necessarily poor and small. Neither are they disconnected from the markets, cities and general social dynamics. They extend across all strata of society. This fosters a move to reconsider the way family farms are being looked at and treated.

Schneider (2014) defines FF as the practice of an economic activity—agriculture—by a social group united by ties and kinship and blood—the family. Thus, FF includes a social mode of working and producing in which an agricultural activity is performed by a domestic group, united by family ties.

He did not identify any standard definition for FF for the six Latin American countries that were analysed. Instead, a number of features of FF in each country were used to establish a working definition of family farms to enable segmentation and foster classification into groups. He adopted a typology based on agricultural contribution to the rural economy as a whole and showcased an economic profile, while allowing for comparison between countries. A summary of the typology is represented in table 4.

Table 4: Important features of local definitions of family farms in Latin America

Countries	Data Source	Main elements/features of definition
Chile	No empirical data; used agricultural census; National Socio-economic Survey	Proportion of family income derived from work in agriculture relative to total self-reported family income
Ecuador	Living Condition Research Study (1999-2006)	Family groups with mostly agricultural income (75% or more) – Specialised Family Farming (SFF) and groups where agriculture was not predominant – Diversified Family Farming (DFF)
Columbia	Household surveys of the National Statistics Department (1996-2011)	SFF (most income from agriculture) Multi-activity households (MAH) (income mainly from non-agricultural activities)
Mexico	Baseline survey; National Survey on Rural Households	Family farms defined as units employing more than 50% family labour; SFF = more than 50% family income from agriculture and forestry; MAH – less than 50% gross income from agriculture and forestry
Guatemala	National Household Survey on Living Conditions	SFF = households with 75% or more of income from agriculture; MAH/DFF = get between 10 and 75% total income from agriculture; Self-employed household with some agricultural activities 10%
Brazil	Agricultural census of the Brazilian Geography and Statistics (2006)	Adopted definition for family farms is in accordance with the law and posit specific requirements (not more than 4 tax modules; use mostly family labour; most family income derive from agriculture; operates with family). Parameters used – income, access to land, technology and educational level. Categories – SFF (>51% of total income), DFF (between 21–50%) and rural households (<20%)

Note: Adapted from Schneider (2014).

Highlights from table 4 are as follows:

- Small farmer 'family farms' are likely to be farms with multiple income sources, have limited access to service providers, land for expansion, and other amenities.
- Rural residents have some agriculture but of only residual value. Production is important for consumption.
- SFF are open to non-agricultural activities, but they are committed to agriculture.

There are family farms with no agricultural income, but they encounter production cost; some with no production cost and no income; other family farms with no specific land area (bee keepers, producers along riverbanks, charcoal and collectors of natural forest).

Highlights and recommendations mooted by Schneider (2014):

- Heterogenic nature of family farms suggests that each category of family farms may have specific needs which should be considered in any development process.
- Policies should not be designed to promote dependence on Government or to suggest that family farmers are poor and dependent but to encourage innovation and empowerment of family farms.
- Improve the inter-sector and territorial dynamics of family farms to better understand the factors underlying change.
- Review current policy behaviour with a view to introduce new initiatives that will strengthen and support FF.
- Create flexible policies that acknowledge the heterogenic nature of family farms and promote inclusiveness.
- Promote value-added activities; build the productive capacity of family farms; reduce dependence on external inputs (seed, fertilizer, etc.) – transition into organic manure; less intensive techniques for plant and animal management (integration between innate knowledge of farmers with empirical/scientific knowledge—complementarity); regulate fairness of contract farming; encourage building of new markets—farmers market, consumers market (home delivery); small local supermarkets and tap into existing public markets—school and hospital nutrition programs.
- A family farm does not rely exclusively on agriculture and may have multiple ways of connecting with economic systems. A more broadened/holistic approach to rural development is needed—greater Internet access; improve rural communications and other amenities which may add values to the social space and minimise rural migration.

Within the six Latin American countries reviewed, Schneider (2014) concluded the following:

- Agriculture continues to be a very important source of income for reproduction of family farms.
- The size of property and/or technology are insufficient parameters for the definition of family farms. For instance, despite being small, many family farmers continue to subsist and reproduce socially.
- The function of rural residence and combination of activities and income sources is an important feature in all the countries investigated.
- The SFF category was the most abundant of all groups.
- Although non-agricultural income and non-agricultural activity of family farms might be minor, it is not negligible.
- Besides the heterogeneous nature of family farms within a country, significant differences exist among family farms between regions and countries. For instance, while a cluster of SFF may be the prevalent form in a given territory of one country, a combination of both SFF and DFF may be the prevalent cluster within the territory in another country. It was noted that a stratification of family farms according to region and territory may have significant importance to their economic performance.

Countries are different in their perception of the definition of family farms and in their public policy framework on family farms. For instance, in Brazil, there was a relatively advanced policy framework for family farms, while in Guatemala there was limited public interest and more social and intellectual interest. Meanwhile, in Chile, the discussion on FF falls within the general agricultural framework.

It was commonplace in the countries reviewed that data was not readily available for the differentiation of family farms and non-family farms.

3.2.3 Qualities of Family Farming according to van der Ploeg

Jan Douwe van der Ploeg (2013) believes that the world of FF is simultaneously archaic and anarchic and attractive and seductive and posits much difficulty to understand, especially in Western societies. He thinks that the family farms are at odds with the bureaucratic logic, formalised protocols and industrial rationale that increasingly dominate our society. FF is also difficult to grasp because of its complex multi-layered and multi-dimensional phenomenon. van der Ploeg identified FF qualities which are summarised in the table 5.

Table 5: Features, key highlights, and threats regarding family farming

Features/Attributes	Highlights	Threats
Controls major re-sources	Land, animals, crops, genetic materials, house, buildings, machinery, the know-how, access to networks and markets; emphasis not on profit but to make a living; finds creative ways to develop the farms	<u>External:</u> High cost of inputs; Low prices; Volatility;
Provides main labour force	Farm is a place for self-employment; dedication, passion, hard work drives development	Neglect from policies; Inaccessible markets; Lack of access to necessary resources (e.g., road, water).
Nexus between family and farm	The farm meets the many needs of the family, while the family provides the possibilities for the farm; the nexus is at the core of any decision for development; specific balance between the mouths to be fed and the hands to work make family farms unique	<u>Internal:</u> Transformation to supplier of labour due to modernisation at the expense of the mentioned features.
Provides food and income	Own production builds self-confidence about food quality	Disappearance of natural growth through clever management of natural, economic, and human resources
Home for the family/ place of belonging	Sense of belonging is tantamount to a place that provides shelter (where the family lives and the children grow)	
Links present, past, and future	Historical and full of memories; returns from the farm provides a sense of pride due to the outcome of work dedication; any upset of such a jointly-constructed entity may result in anger	Growth by taking over other family farms (mergers by way of entrepreneurship)
Where experience accumulates	Learning takes place and knowledge passes on; A family farm is a node in a wider network in which new insights and practices circulates	
Keeps culture alive	Not just an economic entity, but the application and preservation of cultural heritage are important	
Tied to the rural landscape and its environment	Work with rather than against nature, making use of ecological processes and balances instead of disrupting them	

Note: Adapted from van der Ploeg (2013).

Table 5 presents a formidable list of qualities which must be considered in the definition. It helps to place some context to the real life scenarios which Schneider has previously articulated.

3.2.4 The MERCOSUR Group

MERCOSUR is described by Márquez and Ramos (2013) as “one of the world’s most active regions in food production and supply.” MERCOSUR stands “for Mercado Común del Sur or Southern Common Market. It includes four full members (Argentina, Brazil, Paraguay and Uruguay), two associate members (Bolivia and Chile) and an applicant for full membership (Venezuela).” In reference to the group, Márquez and Ramos (2013) describe FF as a model of production that shows distinctive economic and social features, and which differs from other models because of elements such as the organisation of its production systems and the use of natural resources, as well as production-related factors, labour employed, capitalisation levels, and market access.

MERCOSUR has much experience working with family farms. It appointed its first Coordinator of family farms in 1991. In 2004, it created the Specialised Meeting on Family Farming (REAF) which operates as a body which has the mandate to strengthen family farms policies and to promote and facilitate trade of the region’s family farms. REAF now has a registry which admits family farmers who meet several criteria as follows:

- Family’s use of non-farm labour (2 persons allowed for permanent employment)
- Responsibility for command and management must be a rural producer family member
- Family’s place of residence must be on the farm or within short distance from it
- Farm sizes of 50–500 hectares
- More than 50% income must come from the farming operations
- Farms can only have a maximum capitalization of US\$130,000

This model caters for large family farm operations and may not easily be adapted to small farm operators in Latin America and elsewhere in the Caribbean. However, it does provide some ideas on institutional and governance issues and, also, a possible definition.

3.3 CTA Youth E-Debate on Family Farming

The Technical Centre for Agricultural and Rural Transformation (CTA) conducted and reported on an important e-debate entitled: *Youth Sustaining Family Farming through ICTs* during the period 22 September–7 October 2014. The debate was open to youths from African, Caribbean, and Pacific (ACP) countries and was hosted by relevant key experts in both ICTs and subject-matter specialities. The report contained many conclusions with respect to the involvement of youth in FF. Generally, it was determined that youth are involved in several ways in FF and have specific roles, sometimes not only on the farm, but in all segments of the agricultural value chain (AYF and CTA 2015).

Rural youth, based on the different testimonials shared during the discussion, indicated that there was a distinct link between youth involved in FF and where they undertake their farming activities. Young people in FF are living and/or operating mostly in rural areas, which makes youth in FF a bit different from youth and urban farming.

Young people who are involved in FF work, mostly, as family labour, contributing to tasks, such as weeding, harvesting or spraying. Most of these youths start getting involved on family farms by helping with minor tasks, and, eventually, end up taking over the family farm from elderly parents or family members. Hence, although there is the general view that it is difficult to attract youth to farming, in the case of family farms, there is always a young member of the family who seem destined to carry on the traditions of the family farm.

When working on the family farm, young people are usually not paid as employees. In addition, if they are involved in other activities outside the farm and generating income, they often invest this money into the farm.

Youth are also innovation brokers in FF. Young people play an important role as an intermediary in FF. On one hand, they acquire knowledge and skills from their elderly family members and apply these techniques in their farming activities, and on the other hand, they bring in technology and innovation from outside to the family farm. Moreover, youth in general socialise more and tend to pick up new and improved technologies and practices faster. These also include the use of traditional and new ICTs, which in turn, enhances agricultural productivity.

In rural areas in particular, young women have specific roles and contribution in FF. In addition to their help on the farm, they are also involved in care-giving tasks, whereas young men help with or take charge of some of the farming activities left by the father, who is sometimes absent in search for jobs in other cities or urban areas. In both cases, some youth also seek paid employment to contribute toward the family's income and investment without abandoning the domestic chores or other tasks at the farm.

While growing up on a family farm and having been involved in different farm activities, FF has become a lifestyle for many youths. Despite living in urban areas, these young people are still growing their crops in their backyard or roof garden. Some of them even return to the village after completing their studies or having acquired additional knowledge and skills to scale up the family business at home.

There are many young professionals supporting FF through voluntary and social works. Despite the high dependence of many ACP countries on agriculture (especially FF), in terms of its contribution to the national GDP, family farmers and their families are the poorest communities. Some young people recognise this issue and have initiated projects to support family farmers along the value-chain.

Although these conclusions represent a broader global context from the entire ACP group of countries, there are specific parallels within the Caribbean when it comes to these conclusions.

3.4 Public Consultation on Family Farming in Europe - 2013

The European Union (EU) launched a public debate during the period 5 August – 13 October 2013. The aim of this consultation was to understand citizens' experiences and perspectives on FF and, therefore, was open to a large cross-section of European citizens. (European Commission 2013). It was not intended to reflect an official opinion of the EU. It was concluded that in Europe there was a high diversity of family farms with respect to size; activities they engage in; the availability of resources; degree of market integration; competitiveness; and share of labour used. They operate in different economic, agro-ecological, and social contexts, and thus contribute in a different way to smart, sustainable, and inclusive growth.

Participants were requested to identify the main social, economic, and policy challenges. The majority of respondents selected: 'ageing and succession,' 'bargaining power,' and 'administrative burden' as the main challenges.

The context of FF covers various elements. From a sociological perspective, FF is associated with family values, such as solidarity, continuity, and commitment. From an economic viewpoint, FF is identified with specific entrepreneurial skills; business ownership and management; choice and risk behaviour; resilience; and individual behaviour. It reflects a lifestyle based on beliefs and traditions about living and working.

3.5 Family Structure and Family Farming

Much has been written about family structures in the Caribbean. Originally, most families were extended and, besides a mother and father, they involved grandparents, aunts, uncles, even godparents and neighbours. Today, there is a tendency to have nucleated families which have a more restricted group of people of immediate relations, be it a father, mother and immediate siblings. In some nuclear families, a father or a mother may be absent. The principal role of the father is to be an economic provider and protector. They are also involved in the discipline of the children, especially the males. Fathers sometimes have distant relationships with their daughters. However, in the twenty-first century, men have become more involved with all of their children (Seegobin 2003).

Additionally, there is much diversity among Caribbean farm families. While the majority of the families have an African background, there are families from different ethnic origins, such as East Indian, Chinese, Middle Eastern, and European. These different family backgrounds have both similarities and differences in their eventual structures and consequent traditions (Seegobin 2003).

There are implications for FF in these types of evolving structures. It may be noticed that the family farm approach is more suited to an extended family structure. However, there are many nucleated families which manage family farms and there are single parent families which manage farms.

3.6 Major Changes within the Caribbean Agricultural Sector over a 70-year Period

Thomas (1998) described Caribbean agriculture as primarily an international enterprise geared for the production of primary agricultural crops which was sent to metropolitan centres for processing and value adding. The main crop was eventually sugar, but cocoa, coffee, rice, and citrus were produced in plantation systems at various times. Following the somewhat demise of sugar, the Windward Islands and Jamaica were able to cultivate bananas under lucrative tariff arrangements with the United Kingdom (Nurse and Sandiford 1995). These arrangements have come to an end, but there are still efforts to produce bananas for an international market and as a local staple food. Indeed, the bulk of labour for the plantation system came from ex-slaves and indentured labourers. In 2016, this labour has trickled down considerably.

Thomas (1998) noted the conclusion of George Beckford at the George Beckford Memorial Lecture who had chronicled countervailing heroic efforts to make the then Caribbean agricultural economy move away from a plantation economy. Beckford highlighted the emergence of domestic food and agricultural producers who were neither peasant nor proletariat and who struggled relentlessly to develop counter plantation hegemony in the rural sector. These struggles engaged Colonial governments and subsequent independent successors who tried to facilitate a diversified agricultural economy. Today, the region is still trying to diversify its agricultural base. Even so, the agricultural sector is generally declining. For instance, Saint Vincent and the Grenadines had an agriculture contribution to GDP of 12.55% in 1996. There is now a declining contribution of 7.23% in 2010 (Saint Vincent and the Grenadines. MAFFRT 2011). IICA similarly suggest a declining prospect (IICA 1998). Table 6, showing agricultural GDP for the period 1996-2010, describes in more detail the nature of the decline in Saint Vincent and the Grenadines.

Table 6: Composition of agricultural GDP, 1996-2010: Saint Vincent and the Grenadines

Item	Year											
	1996	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Agriculture (%)	100	100	100	100	100	100	100	100	100	100	100	100
Bananas (%)	31.64	32.04	28.92	28.98	20.68	22.21	19.19	14.93	14.50	13.63	10.11	7.07
Other crops (%)	42.80	44.54	47.82	50.86	55.51	52.59	55.06	57.31	57.63	58.86	52.82	65.25
Livestock (%)	6.15	15.13	14.69	13.62	15.49	16.69	17.10	19.37	18.62	21.55	29.25	19.70
Forestry (%)	4.26	1.14	1.20	1.06	1.09	1.11	1.07	1.06	0.96	0.98	0.84	0.99
Fisheries (%)	15.21	7.13	7.35	5.48	7.23	7.40	7.59	7.34	8.28	5.17	6.99	6.98
Value of Agric GDP EC\$M	-	86.49	80.59	89.86	85.32	82.14	83.97	86.92	96.46	92.52	106.6	86.76

Source: Saint Vincent and the Grenadines. MAFFRT (2011, 5)

Note: Adapted from Saint Vincent and the Grenadines Statistical Office/Eastern Caribbean Central Bank (ECCB): Tables on GDP by Economic Activity at Basic Prices, in constant (2006) Prices.

Notably, producers have opted to produce other crops like the root crops and food crops and, additionally, livestock instead of the traditional bananas which had dominated the sector from the 1950s to 1995. The initial impacts of climate change had begun to show in droughts and hurricanes. This coupled with competitive marketing from other banana producing regions, and the onset of new diseases contributed to this decline. The new type of production can be an indication that the country is trying to meet food security goals by producing a range of food crops and livestock. This can help to reduce food imports.

Different countries have been able to survive with an agriculture sector with continued interest in what is left of their plantation economies albeit in fiercely competitive market environments. Several countries have also challenged new agricultural enterprises especially non-crop ones. All of the countries see agriculture as a pathway to alleviate high food import bills; ensure food and nutrition security; sustain healthy, sustainable environments; and maintain livelihood opportunities for citizens.

In this scenario, many different types of producers have survived. Among them are the family farmers who will need specific policies to help them sustain their agricultural activities. They face problems of severe displacement through the vagaries of climate change which, occasionally, brings natural disasters to their farming systems. Sometimes, their lands are threatened by alternative sectors such as housing, tourism, and industry. They suffer acute labour shortages. They may be victims of praedial larceny. There is the high cost of inputs which is exacerbated by the additional circumstance of an occasional outburst of new pest and diseases. Then, there is the never ending challenge of finding and maintaining markets for agricultural commodities. The farm family also faces rural-urban migration especially among younger members and this may be migration to centres outside of their immediate country.

4. Field Study Results

There was both contrast and similarity in the selection of farmers from the four countries visited. With respect to Guyana and, as was previously stated, the study interrogated typical farms which had emerged from the original plantation economies and those farms which had an indigenous relationship with agricultural livelihood. These farms were small farms and had to exist alongside larger agribusiness operations which produced sugarcane and rice for export and some newer initiatives which had invited investors to expand the agricultural export business. The study was able to glean an idea of both livestock and crop farming systems. The non-indigenous farm had similarities to the farms which operated in Jamaica and Saint Vincent and the Grenadines.

The existence of a dominant Amerindian community is unique to Guyana. These are indigenous (native) Guyanese who live in Guyana's relatively vast interior. These communities are noted for their strong family traditions, which are imbued in their methods of land ownership and farming operations. The shared commitment to maintain family traditions, the element of trust, maintaining the cohesiveness of the family are typical and common features. Consequently, farming is perceived to be a way of life rather than a business among the Amerindians. There are differences among the families with an Amerindian history. Not only do these family farm entities provide the mainstay of the family, they also protect native traditions. They reportedly also place much emphasis on their personal food security.

The Haitian farms were from designated communities where almost everyone lives in strong family farm traditions. They again had to exist alongside initiatives to produce crops and livestock in larger quantities. These initiatives were aided and abetted by state agriculture policy which currently has interest in sisal, corn, rice, beans, bananas, vegetables, pigs and oil palm. There is a deep-seated motivation in the family to continue farming operations related to a pride in ownership, self-employment, and a continued love for agriculture. All the farmers live on the farm. They tend to have several children who would directly or indirectly assist in farming operations. Some had other occupations like security assignments, plumbing, electrical technicians, or carpentry. These other occupations only seem to service the immediate community in which they reside. In two cases, there was some reliance on remittances from abroad.

Regarding the Jamaican selection, many of the farms were relatively large and provided evidence of successful family farm traditions which spanned more than 40 years. These farms seemed very viable and had stalwart family traditions. They serve to demonstrate the values that could be attached to family farms which had committed contributions from all family members whether they still lived on the farm with the family or elsewhere. The farms seem to have benefitted from long-standing traditions of viable agricultural production which began from the colonial origins of Jamaica. These farms served to identify the large type of family farm. To decipher the circumstances of the smaller farms in Jamaica, the study had to rely on the discus-

sions held with the stakeholders who seemed adequately familiar with the numerous small and medium farms in Jamaica.

The selected farms from Saint Vincent and the Grenadines depicted smaller and successful family farms. The island is much smaller than Jamaica so no doubt one does not expect to be able to easily find large-sized farms. The island has its own agricultural traditions when it comes to farming practices. The farms in Saint Vincent and the Grenadines tended to be mixed-crop farms with a small livestock production component. It is likely that the larger estates of the colonial past no longer exist. These large farms are replaced by smaller establishments which cater for numerous growers who seek a livelihood from farming. Yet, it was possible to discern the features of the family farms there.

In all of the family farms, there was a distinct pattern of agricultural development which made it possible to establish the state of FF. Consequently, the study was able to parallel the approach to discussing the pertinent issues and begin to arrive at a consensus regarding what constitutes a family farm in the Caribbean.

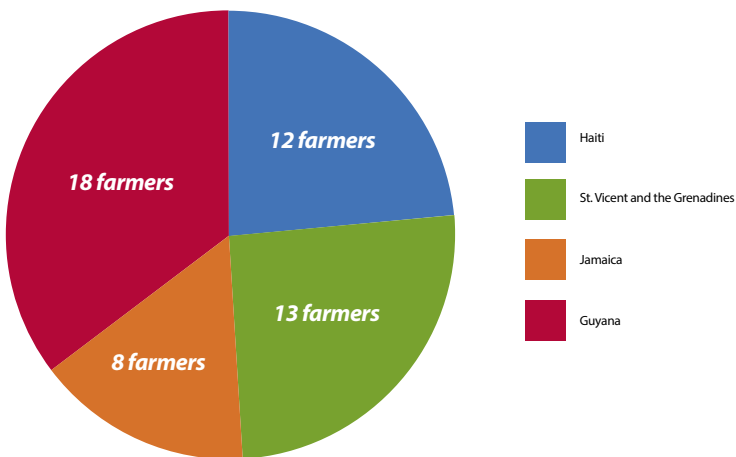
4.1 Quantitative Analyses

These field study results begin with a collection of descriptive statistics which give the characterisation a quantitative analytical perspective. This section will be followed by a qualitative analysis which emerged from case studies of farmers and stakeholders.

4.1.1 Location of Farmers Interviewed

The pie chart in figure 1 provides a graphic analysis of the location of the farmers.

Figure 1: Distribution of farmers interviewed by country



Of the 51 farmers interviewed, 18 were from Guyana; 12 from Haiti, 8 from Jamaica; and 13 from St Vincent and the Grenadines.

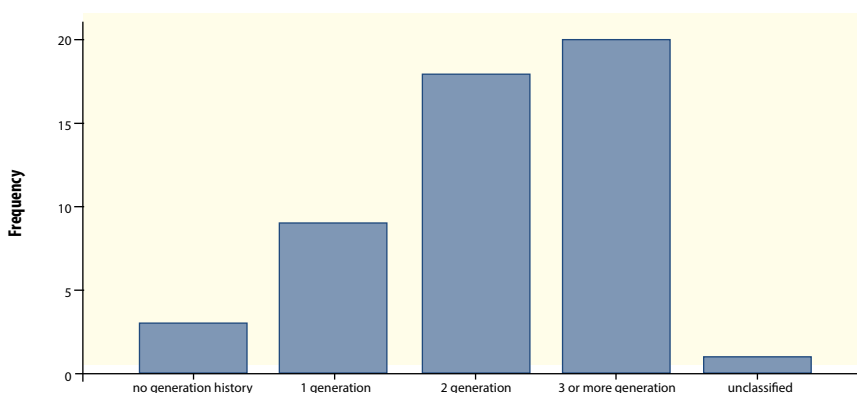
4.1.2 Generational Perspective



Farmer and two sons performing farm duties in Manchester, Jamaica. Photo: Glenroy Ennis, 2016.

The bar chart in figure 2 indicates the number of generations reflected in the family farms participating in the study.

Figure 2: Generational background among the sample family farms



Three of the 51 farmers have no generational history. Nine farmers come from one generation of farming; 18 farmers come from two generations; 20 farmers came from three generations; and one farmer said he fell in the category of unclassified. A major characterisation feature of family farms is their ability to span more than one generation. This feature is clearly indicated in this statistic.

4.1.3 Farm Sizes



Crop cultivation in Saint Vincent and the Grenadines. Photo: David Dolly, 2016.

Most of these family farms occupied less than five hectares of land. Table 7 indicates the distribution of sizes among the 51 farms.



Cabbage cultivation in Jamaica. Photo: Glenroy Ennis, 2016.

Table 7: Farm sizes among the sample family farms

Land (ha)	Frequency	%
≤ 5	35	68.6
6-10	7	13.7
≥ 11	9	17.7
Total	51	100.0

It is instructive to note that family farms may occupy a range of sizes which can be relatively small, medium, and large by Caribbean standards.

4.1.4 Educational Perspectives

Table 8 shows the education levels of the farmers interviewed.

Table 8: Education level of head of household among the sample family farms

Education Level	Frequency	%
No Schooling	4	7.8
Primary School	24	47.1
Secondary School	20	39.2
Tertiary institution	3	5.9
Total	51	100.0

Four (7.8%) farmers stated that they had no schooling and 24 (47.1%) farmers said they only had primary school education. Twenty (39.2%) farmers went to secondary school, while 3 (5.9%) farmers attained tertiary education. This survey shows that the majority of farmers have primary school education. This data is now presented in a bar chart alongside the ages of the farmers in order to further depict the scenario. See figure 3.

Figure 3: Age group and level of education of the head of household of the sample family farms

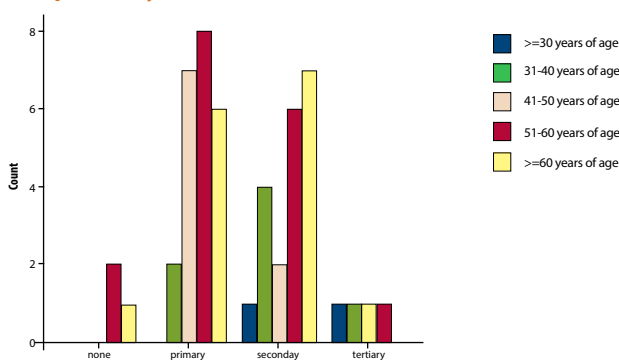


Figure 3 illustrates the education level attained by the head of household and the age of head of household. Two farmers between the ages of 51 and 60 years of age and one farmer over the age of 60 stated that they did not go to school. Two farmers between the ages of 31 and 40 years of age, seven farmers between the ages of 41 and 50 years of age, eight farmers between the ages of 51 and 60 years of age and six farmers over the age of 60 went to primary school. One farmer under the age of 31, four farmers between the ages of 31 and 40 years of age, two farmers between the ages of 41 and 50 years of age, six farmers between the ages of 51 and

60 years of age and seven farmers over the age of 60 went to secondary school. One farmer under the age of 31, one farmer between the ages of 31 and 40 years of age, one farmer between the ages of 41 and 50 years of age and one farmer between the ages of 51 and 60 years of age went to a tertiary institution. It is clear that younger family farmers are beginning to become educated more easily albeit at the secondary and primary level. See annex XIII, table A for related data.

4.1.5 Labour Availability



Plant nursery and female farmer and IICA representative in Saint Vincent and the Grenadines. Photo: David Dolly, 2016.

Table 9 shows the labour used on the farm by farmers from Guyana, Haiti, Jamaica, and St Vincent and the Grenadines. Three of the farmers stated that they work the farm alone. Seven farmers stated that they work the farm along with one to four hired labourers and two farmers stated that they work the farm along with five to nine hired labourers. Three farmers stated that they work the farm along with 10 or more labourers and 13 farmers stated that they work the farm along with their family. Twenty-three farmers stated that they work the farm along with their family and hired labour.

Table 9: Labour availability on sample family farms

Labour Availability	Frequency	%
Farmer	3	5.9
Farmer + 1 to 4 labourers	7	13.7
Farmer + 5 to 9 labourers	2	3.9
Farmer + > 10 labourers	3	5.9
Farmer and family labour	13	25.5
Farmer, family labour and labourers	23	45.1
Total	51	100.0

Table 9 illustrates that when it comes to labour availability the farmers are definitely able to use a mixture of family and hired labour when necessary.

4.1.6 Group Involvement



Farmers of Perth Village with authors in East Coast, Guyana. Photo: David Dolly, 2016.

Table 10 shows farmers from the four Caribbean countries and the group activities in which they were involved.

Table 10: Group involvement among the sample family farms

Group Involvement	Frequency	%
No involvement	8	15.7
Farmers group	12	23.5
Church group	5	9.8
Farmers and church groups	9	17.6
Community group	13	25.5
Community and church groups	4	7.8
Total	51	100.0

Eight farmers stated that they were not involved in any groups in the community and 12 were involved in a farmers group. Five farmers stated they were involved in the church group and nine said they were both in the farmers and church groups within their communities. Thirteen farmers stated they were in community groups and four said they were involved in both the church and community groups.

Table 11 shows the different community activities in which the head of the household was involved by country.

Table 11: Location and group involvement of farmers interviewed

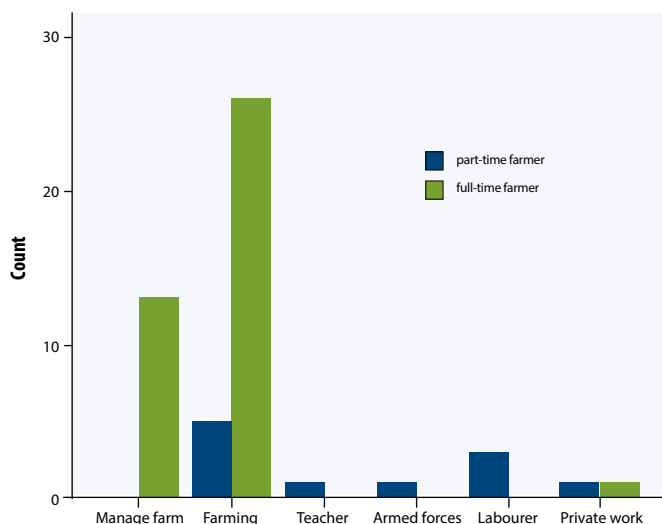
Group Involvement	Location of Head of Household				Total
	Guyana	Haiti	Jamaica	Saint Vincent and the Grenadines	
No involvement	0	4	0	4	8
Farmers group	2	0	3	7	12
Church group	0	5	0	0	5
Farmers and church groups	2	2	5	0	9
Community group	10	1	0	2	13
Community and church groups	4	0	0	0	4
Total	18	12	8	13	51

Four farmers from Haiti and four from Saint Vincent and the Grenadines were not involved in any groups. Seven farmers from St Vincent and the Grenadines, three from Jamaica and two from Guyana were in a farmers group. Only five farmers from Haiti were involved in a church group. Two farmers from Haiti, five from Jamaica and two from Guyana were involved in both a farmers group and church group. One farmer from Haiti, two from St Vincent and the Grenadines and 10 from Guyana were in a community group. Only four farmers from Guyana were in both a church and community group.

4.1.7 Livelihood Activities

Figure 4 depicts the livelihood activities on the farm/other activities and full-time or part-time status of the farmers interviewed.

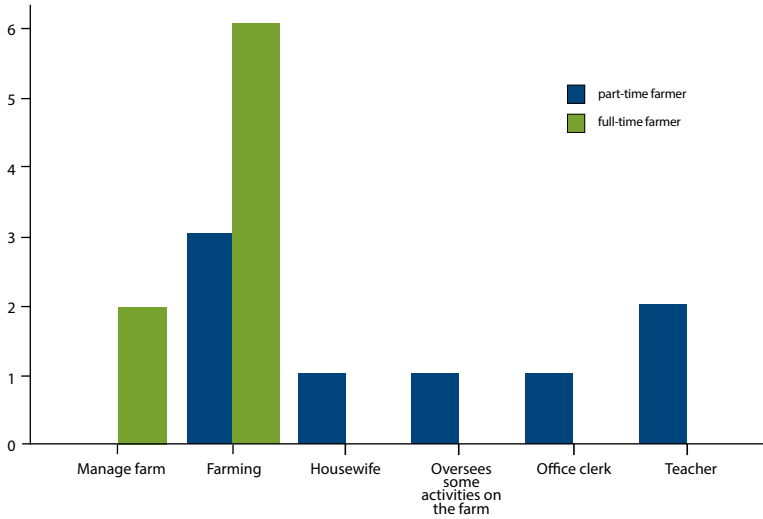
Figure 4: Livelihood activities and status of the head of household among the sample family farms



Thirteen of the farmers interviewed are full-time farmers and managers of their farm. Twenty-six farmers farm full-time and five farm part-time. One part-time farmer is a teacher and another person that farms part-time is in the armed forces. Three part-time farmers are labourers outside of farming and one part-time farmer does private work. See annex XIII, table B for related data.

Figure 5 shows the livelihood activities on the farm/other activities and full-time or part-time status of the spouses of the head of the household.

Figure 5: Livelihood activities and status of spouses among the sample family farms



Two of the spouses interviewed are full-time farmers and managers of their farm. Six spouses farm full-time and three farm part-time. One spouse, who farms part-time, is a housewife and another spouse oversees the activities on the farm. One spouse who farms part-time is an office clerk and two other spouses are teachers. Figure 5 reflects that most spouses work full-time on the farm both as farmer or manager and others work part-time at various jobs. See annex XIII, table C for related data.

4.2 Social Attributes of Caribbean Family Farms



Grating cassava in Essequibo, Guyana. Photo: David Dolly, 2016.

In the Caribbean, the family farm consists of identified family members who are from the immediate family tree. In today's world, such a family tree may extend to the inclusion of special members who are not related along specific blood lines. Such families may be nuclear or extended families. There is a shift towards nuclear family farms and towards special definitions of family members within a family farm. All constituent members directly or indirectly own the farm. There is a deep-seated motivation in the family to continue farming operations related to a pride in ownership, self-employment, and a continued love for agriculture. This type of farming is seen as a guaranteed way of bonding family traditions, thereby, building confidence, self-worth, and a modelled form of independence. The family farm is seen as a cooperation of designated family members to make the farm work. Even when members/owners of the family farm unit inevitably migrate to other countries, they may still contribute to preserve the values of the family farm. They may especially contribute financial remittances to the farm.



Spreading parboiled rice at a communal facility in Haiti. Photo: David Dolly, 2016.

While family members may use produce from the farm, this is not to be an exclusive criteria for identification. The diet of any household in today's world is much more varied than what a single farm unit may produce. Hence, more importantly, the family farm would contribute a quantum of routine income to the household and a more appropriate nutritional health and physical fitness philosophy.

The family farm is suitably oriented to encourage and engage national efforts towards food security in respective countries. It encourages the availability of food in a timely manner. It may contribute to acceptable physical fitness and to healthy eating.

Family farm members have suitable levels of literacy and schooling which in turn allow their levels of education to contribute to the leadership decisions on the farm. Most members possess at least a primary school education. In very rare cases, there is limited schooling among family members. All the participants acknowledge the importance of education in order to facilitate progress. It would seem that the current family farm structure predisposes members to potential educational opportunities which directly and indirectly benefit the farm. It would be essential that appropriate mechanisms exist in order to facilitate an improved educational process for the farm families. These farms were benefitting from processes which were developed by faith-based operations, farmers groups, the state agricultural systems and specialist agricultural organisations. There is awareness of social media even though many locations did not have as much access as possible in today's world of ready internet access.

4.3 Governance Perspectives of Caribbean Family Farms



Banana nursery for banana rehabilitation project in Saint Vincent and the Grenadines. Photo: David Dolly, 2016.

Throughout the Caribbean, it is commonplace to find family farms being solely managed by a male or female household head although sometimes there is joint headship. Females still are shielded from absolute headship and it is common to only see the rise of female leadership when their partner leaves the home for whatever reason. There is a distinct division of labour among the family members. Females tend to have their roles associated with harvesting and marketing produce. While a family decision is usually needed to guide leadership position, not all family members are obligated to participate in such a decision. This decision is intended to perpetuate the farm's farming systems.

With regard to state governance, family farms are guided by the legal implication of State laws regarding agricultural holdings. The farms become governed in special ways which facilitate the offer of state benefits, such as incentives, subsidies, and occasional grants. In family farms, as in other farms, most of the leaders are aged personnel. However, these family farms usually have at least one young member to begin to take over the management so the aging script of agricultural holdings become somewhat neutralised by the family farm governance. While many household heads have ages of over 50 years, there is an ability of the farm to have a younger family member who can replace this headship when necessary. Yet some of the smaller family farms seem to have a challenge with leadership succession. These farms may not have younger members who wish to continue with farming and are at a survival risk. Small family farms, therefore, are more prone to a survival risk.

When it comes to the Amerindian communities, the farm families are grouped into distinct villages, each of which is governed by a village council. As a part of its mandate, the village council monitors the land tenure system of the individual farm family and the developmental activities of the villages. The council usually screens any intervention for its impact on the cultural and socio-economic stability of the village. As such, the decision of the farm family is influenced by the mandate of the village council.

There is also a strong governance influence from community activities regarding the family's faith and religion; membership in varied agricultural commodity groups; membership in special projects and membership in political groups.

4.4 Economic Features of Caribbean Family Farms

When it comes to economics, this discourse provides an account of the labour, capital and land. Labour availability is discussed first. In the Caribbean, there is the unavailability of both skilled labour and unskilled agricultural labour. Thus, there are shared family responsibilities when it comes to the use of labour on family farms. Labour shortages are sometimes exacerbated by low productivity and the drift of youth away from agriculture. In many family farms, it is therefore difficult to get the younger members to become involved in the perpetuation of the farming activities. The younger members may argue that the income is inadequate to suffice their needs, unlike earlier periods of time when economies of scale allowed adequate income from farming operations which could subsequently meet all the family needs. So, while family farms prefer their family members to be the main labour force, many family farms must employ often costly labour in order to complete daily tasks. While this helps to maintain farming operations, it affects the ability of the farm to carry out sustained family traditions of farming; often propagating substandard practices and scaled down operations.

Family farm members may not actively become involved in the daily livelihood activities on the farm but may still contribute to these activities through monetary investment contributions from other incomes. Financial investments are mainly for agricultural input supplies and basic application and harvesting equipment. These

said incomes (for financial investment) are from other occupations which may be both local and/or international and may come from occupations which may be professional or sub professional or even unskilled.

The next important economic concern after labour and capital investment is that of land ownership. Most family farms occupy freehold land which has been bequeathed to the family over generations. In a few instances, the land is leased from the state or from another private owner. There is always a family ownership mechanism which dictates the use of the land for farming purposes. Some families would operate several parcels in the vicinity of one another. This was especially noticeable in Haiti. The family usually resides on the farm site, but in some instances the family may reside away from the property. Also, noticeable in Saint Vincent and the Grenadines, a normal custom has been to practice farming on a plot of land within proximity to the person's main residence. Among the populations of Amerindian origin, all members have legal rights to use any part of their lands. As such, they may choose to select and occupy a strip of land once it is available and notwithstanding the overriding empowerment of the village council.

4.5 Agricultural Attributes of Caribbean Family Farms



Nursery cultivation in Linden, Guyana. Photo: David Dolly, 2016.

In the Caribbean, most family farms carry out mixed farming operations be it a mix of livestock; of crops; or of crops and livestock. Among the mix of crop and livestock, several of the farms use their livestock as a personal source of protein or as a financial 'bank' when extra cash is needed by the family. Some farms may produce specialty items like organic produce, specific horticultural products, and honey. The farmers are typically able to spread their investments to cater for diverse marketing opportunities. Some of the farms rely on farm gate sales. Others rely on retail sales



Rabbit production by organic family farmer in Saint Vincent and the Grenadines. Photo: David Dolly, 2016.

at municipal and other such markets. Yet, others may have specific contractual arrangements for the delivery of their commodities. All farms share a small portion of their produce freely with community members.

The farm families rely mainly on their own intelligence with regard to the practices they may employ. In this regard much of their production approaches are very traditional. Occasionally, these practices may be influenced by focused training from service providers such as the state, a relevant agency or an FFS. Farmers may sustain the adoption of a new practice over a long period of time or may return to their traditional practices after a so called 'honeymoon period.' There is the influence of modern communication technologies through the use of the smart phone, especially in the marketing strategies which the farms practice. Connectivity for ICTs is sometimes limited and this affects ICT usage.

4.5.1 Guyana



Broiler production on family farm with farming system in Linden, Guyana. Photo: David Dolly, 2016.

4.5.1.1 Important Characteristics of Family Farms in Guyana

Table 12 summarises selected characteristics of 18 family farms from Guyana.

Table 12: Attributes of eighteen family farmers selected by IICA: Guyana

Attributes	Important Features
Type of Farm	All the respondents were engaged in mixed farming consisting primarily of vegetables, root crops, and small livestock. The main small livestock include pigs, yard fowls, sheep, and goat. Only 17% of them were involved in mainly livestock production (beef cattle, pigs, and poultry), but they also had their kitchen gardens.
Tenure	67% of the respondents accessed land through a special lease arrangement due to their heritage; 28% had regular partial or full leases; 2% of them owned all their lands.
Farm Size	Although the average farm size of the respondents was 3.8 ha, 62% of them had < 5 ha and 38% had > 5 ha.
Family Involvement	78% of these household heads were males. When females headed families, they were single parents. Other family members who were living at home were involved.

Attributes	Important Features
No. of Generations	78% of the respondents claimed that their farms were in operation for more than 3 generations; 17% of them reported being in operation for 2 generations. There was one first generation family farm.
Residence	33% of the respondents were living on one of the lots where they were farming. Only 28% of the respondents had the extended type of family.
Education	The levels of education acquired by individuals heading household were 44%, 33% and 17% for primary, secondary, and tertiary, respectively. One respondent had not gone school.
Age (Owner)	The average age of the farm owner is 51 yrs old.
Labour	83% of the owners were engaged full-time on the farm unit. The other 17% worked on a part-time basis as cooks in the mining sector. In all instances, there were other family members who either serve full-time or part-time. All major tasks on the farms were carried out by family members. There was periodic use of non-family labour, especially during land preparation or at harvesting.
Capital/ Finance	All the respondents relied heavily on the reinvestment capital from the farm to continue their operations; 45% relied solely on farm income for reinvestment; 33% of them were using some loans and 22% were using income generated elsewhere (logging and mining).
Marketing/ Disposal	Majority (78%) of the respondents sold their farm produce on the local market either through hawkers or by family members; 33% were involved in home-based agro processing. An average of 15% of the farm produce was used for home consumption or as gifts. Some respondents encountered large amount of wastage.
Returns from Farm to Family	Only 33% of the respondents relied fully on the farm for their livelihoods. The other 67% had an average reliance of the farm of 50%. They obtained additional support mainly from logging, working in the mines, remittance, pension and other non-farm activities.
Government/ Service Providers	78% of the respondents said they received limited support from Government and/or service providers; 44% claimed to have received no form of Government support.
Community Involvement	All the respondents involved in community activities, most held some levels of leadership positions.
Comments	On an average, the respondents were involved in farming for 30 yrs; 72% of the respondents said that they had access to very low farm technology. The other 28% were using medium levels of technology.

Note: See annex I for detailed perspectives.

These features were typical of the descriptions for family farms in Jamaica and Saint Vincent and the Grenadines. The farmers were able to distinguish a generational aspect. They had secure ownership. There was family involvement over a long period of time.

4.5.1.2 Stakeholder Perspectives of Family Farms in Guyana



Protected agricultural infrastructure in Rupununi, Guyana. Photo: David Dolly, 2016.

There was consensus among the stakeholders that about 75% of all farms in Guyana may be categorized as family farms. This is because the majority of the farmers in Guyana rely solely on the farm for their livelihood and they are usually operated by families. The stakeholders admitted to their limited attention to the FF concept. Most of them did not contribute to the IYFF. They are prepared to incorporate this new dimension to farming in the Caribbean. See annex II for detailed perspectives.

4.5.2 Haiti

4.5.2.1 Important Characteristics of Family Farms in Haiti



IICA staff member checking rice at collection facility in Haiti. Photo: David Dolly, 2016.

Table 13 summarises the characteristics of the 12 farms which were deemed important

Table 13: Attributes of twelve family farmers selected by IICA: Haiti

Attributes	Important Features
Type of Farm	84% of the farms were engaged in mixed farming consisting primarily of vegetables and small livestock. The other 16% had vegetables only.
Tenure	100 % of the farm families owned their land. There may be several parcels of land. They would still rent/lease other parcels.
Farm Size	Farm sizes vary from 2.5 to 16.5 ha. The most common size was 2.5 ha.
Family Involvement	In all instances the most active member is the male head of household. Other family members were involved to some extent in the farming operation.
No. of Generations	The majority of generations ranged between 2 and 3. There was only 1 farm being 1 generation.
Residence	In all instances, the main owner was living on the property.
Education	16% of the main owners had no schooling, for the rest some had secondary level education and the rest primary only.
Age (Owner)	The average age of the farm owner is 52 yrs, the oldest being 72 yrs, the youngest 34.
Capital/Finance	All the respondents relied heavily on the reinvestment capital from the farm to continue their operations. Some of them supplemented their investment with small sets of finances from other salaries or remittances.
Marketing/ Disposal	All the respondents sold their farm produce on the local market either through hawkers (e.g., Madame Sarah's), by family members or through specific buying contracts. None of the produce is exported
Returns from Farm to Family	100% of the respondents relied fully on the farm for their livelihoods. Some (>25%) had additional sources of income.
Government/ Service Providers	All the respondents said they received limited support from Government and/or service providers.
Community Involvement	All the respondents were involved in community activities, some held leadership positions.
Comments	On an average, the families were involved in farming for a long time. Low technology application.

Note: See annex III for detailed perspectives.

An important distinguishing feature of the Haitian farms is the distinct possibility that all small farms are family farms. Most farmers do not seem to have another option of livelihood given the Haitian economy of limited economic opportunity. Hence, this type of farming continues to bond family traditions.

4.5.2.2 Stakeholder Perspectives of Family Farms in Haiti



Drying rice in Haiti. Photo: David Dolly, 2016.

From the onset, it was suggested that family farms were always in existence in Haiti. While there is some new and desired focus on the family farm by international agencies, it really is not new. So, it was made very clear that the family farm is the main type of farm in the country. It was also acknowledged that the family farm is synonymous with the 'small' farm and that 95% of the farms in Haiti are small family farms. It seemed impossible to separate the two concepts. Yet, family farms may be small, medium or large in size (i.e., < 1 ha, 1-2 ha and > 2 ha), Small is, therefore, seen as a complex of features and not only the size factor. A key to identifying these farms is their use of family labour. Family labour is not exclusive as these farms must still employ other sets of labour especially during specific periods of cultivation. A more detailed account is presented in annex IV.

4.5.3 Jamaica

4.5.3.1 Important Characteristics of Family Farms in Jamaica



Family farmer in Westmoreland, Jamaica. Photo: Glenroy Ennis, 2016.

Table 14 summarises the characteristics of the eight farms which were deemed important

Table 14: Attributes of eight family farmers selected by IICA: Jamaica

Attributes	Important Features
Type of Farm	88% of the respondents were engaged in mixed farming consisting primarily of root crops, tree crops, and small livestock; 38% of them had beef cattle included in the mixed farming system. Only one farmer (12%) had a livestock operation (broilers, beef cattle, sheep, and goat).
Tenure	75% of the farm families either owned their entire land holdings or more than 80%. The other 25% leased more than 90% of the land that they occupied.
Farm Size	Although the average farm size of the respondents was 18.6 ha, 50% of them had less than 10 ha. Those with more than 10 ha included livestock and sugarcane in their farming system.
Family Involvement	In all instances, the most active member is the senior of the family and assumes the major role in the farm unit; 75% of these major players were males. All other affiliated family members were involved to some extent in the farming operation.
No. of Generations	The number of generations ranged between 2 and 4 with the highest (38%) being 2 and 3 generations.
Residence	In all instances, the main owner was living on the property. It was common place for grown-up children to own separate households either on the same property or at different locations. Only 25% of the respondents had the extended type of family.
Education	90% of the main owners had secondary level education.
Age (Owner)	The average age of the farm owner is 62 yrs old.
Labour	All the owners were engaged full-time on the farm unit. Other family members either serve full-time or part-time. All major tasks on the farms were carried out by family member. In all instances, non-family labour was employed periodically, especially during land preparation or at harvesting.
Capital/ Finance	All the respondents relied heavily on the reinvestment capital from the farm to continue their operations; 63% of them supplemented their investment either with bank loans, credit from farm stores or through crop liens.
Marketing/ Disposal	Majority (75%) of the respondents sold their farm produce on the local market either through hawkers or by family members. The other 25% were selling through contractual market arrangements. Only 12% of the respondents producing partly for the export market. An average of 2% of the farm produce was used for home consumption or as gifts.
Returns from Farm to Family	63% of the respondents relied fully on the farm for their livelihoods. The other 27% had an average reliance of 85%. They obtained additional support from remittance, pension, and non-farm activities.
Government/ Service Providers	All the respondents said they received limited support from Government and/or service providers.
Community Involvement	All the respondents involved in community activities, most of whom held leadership positions.
Comments	On an average, the respondents were involved in farming for 40 yrs; 88% of the respondents said that they had access to very low farm technology.

Note: See annex V for detailed perspectives.

In describing their family farm operations in Jamaica, all the respondents were able to make connections to the generational aspect of their current farming statuses. In all instances, members were eager to showcase some aspects of the historical mode of operation that was passed on to them especially where they were attempting to modernise their practices. The heads of the farming operations claimed that they developed interests in farming during their childhood under the guidance of their parents or grandparents. This inculcated a natural love for what they do. Even when the farmers were not encouraging their children to remain on the farm, they still recognised the importance of family involvement to perpetuate such a farming system. In many instances, all the members of the households who were capable were engaged in aspects of the farming operations. Some respondents described the structure of their operations as a form of family cooperative where the family manages, share responsibilities, resources, and the benefits from the farm.

In all instances, family members were the main labour force for the farm units visited. The respondents claimed that it was not difficult to get the family to participate in the farming operations. The major disincentive is usually the hard work involved during practice and the resultant minimal economic returns from the farm entity. However, many respondents claimed that the challenges to provide adequate labour and farm resources compelled them to carry out substandard or scaled-down operations. As a result, they were unable to sustain or develop some aspects of their traditional approaches

The respondents claimed that several factors motivated them to continue their FF operations. These include the sense of owning a business; self-employment; love for farming; being able to model independence for children who are often drawn to it; the provision of a guaranteed way of life; natural bonding to the farm; a sense of responsibility to continue the traditions of the generation; keeping the family together; building confidence and self-worth; and a knowledge of parents taking care of family through the farm operations. They claimed that they were also encouraged by the fact that the family becomes involved in all major aspects of the daily activities of the farm. This brought about greater trust, dedication and offered a sense of protection. The respondents were encouraged by the fact that the family farm was capable of satisfying their basic needs on a timely basis, including their nutritional health and physical fitness.

4.5.3.2 Stakeholder Perspectives of Family Farms in Jamaica



Peanut cultivation in Saint Vincent and the Grenadines. Photo: David Dolly, 2016.

The study showed that in Jamaica, the concept of FF is not widely used throughout the agricultural sector. The majority of the respondents were unable to distinguish between family farms and non-family farms. When proposed with the possible existence of family farms most of the respondents were able to recognise their existence but claimed little association with these farms in their daily work. They believed that the notion of the farm family implies the existence of a farming structure that is operating by an extended family.

In Jamaica, a common view of major stakeholders (policy makers and service providers) is that the traditional definition of a family farm which includes the extended family might have been affected due to the current shift towards nuclear families. Also, the recent practice of remittances from family members living elsewhere may have impacted the characteristics of the farm family structure in many ways.

Many of the stakeholders equated the meaning of small farms with family farms and required this study to establish ways to distinguish between the small farm and the family farm. They claimed that, within the Jamaican context, it may be skewed towards that of a small farmer. The small farmers represent more than 80% of farms throughout the island. A key characteristic of these farms is that they each occupy less than 2 hectares.

During the discussions, the stakeholders began formulating the elements which constitute a definition of family farms from a Jamaican perspective. Some respondents claimed that a family farm is a farm entity that has a type of cooperative structure where the family members share labour, resources, perpetuate genera-

tional values, traditions and reflect strong social attachments and bonding. It was felt that the strong grasp that the farm family has on traditional beliefs and generational values may at times impact negatively on its development. For instance, there are occasions where known impediments are strongly linked to traditional practice at the sacrifice of improved practices. The respondents believed that in farm family settings, the whole family unit is involved. The family farm is seen as a way of life where everyone comes together to make it work. The operation is usually carried out on the same piece of land for several generations. Such a practice instils in every member a special type of bonding to farm entity. Where family members may have migrated, they tend not to sever ties and always look forward to return in order share in the traditions of the farm. Those family members who live elsewhere are usually still willing to provide financial and other support to the preservation of such values. As such, the definition of family farm should not be limited by geographic boundaries. See annexes VI and VII for detailed perspectives.

4.5.4 Saint Vincent and the Grenadines

4.5.4.1 Important Characteristics of Family Farms in Saint Vincent and the Grenadines



Head of household, organic family farm in Saint Vincent and the Grenadines. Photo: David Dolly, 2016.

This interaction with the 13 selected (by IICA) farmers in Saint Vincent and the Grenadines gave very useful insights into the criteria which can be used to define a family farm in Saint Vincent and the Grenadines and by extension, the Caribbean.

All the respondents were able to place a descriptor on the generational aspect of their involvement in farming. There was the notion that a family farm provides for the family, be it through the sale of produce or the household use of produce which the farm produced. There was a level of involvement of family members in the provision of labour and capital. With regard to capital, this may include pension funds; income

from other professions which may reside within family; remittances from abroad; and monies used from the sale of farm produce. The farms showed various patterns of state, non-state and private ownership, but the family's decision was essential in the use of the land for FF.

Most family units were less than five hectares and each, invariably, cultivated a mix of crops. There was the often provision for some livestock which supplemented the family's supply of animal protein. There seemed scope for more livestock farms which exclusively produce livestock commodities and had the potential to reduce livestock imports into the country. Most farms with livestock were prepared to enter into smaller production capacities which catered for their immediate family needs and only little extra income. Yet, there was one outstanding livestock family farm which produced a range of livestock alongside its mix of crops. All farms had an interest in community groups that existed. There was the often complaint that the groups do not last for long periods of times. Family farms inculcated independence and a sense of owning a business which empowered the family. Empowerment came through self-employment; building confidence and self-worth; and a love for farming occupations. These farms helped the family to bond and to provide traditions from one generation to another. In the process and despite the drift of the younger generation away from farming, there was the attraction of at least one young family member to continue the farming operations which the entire family once did.

Table 15 summarises the characteristics of the 13 farms which were deemed important.

Table 15: Attributes of thirteen family farmers selected by IICA: Saint Vincent and the Grenadines

Attributes	Description
Type of Farm	Approximately 84% of the respondents had mixed crop and livestock operations consisting of vegetables, root crop, legumes, and small livestock. One farmer had a small amount of cattle. Approximately 16% had mixed vegetable production exclusively. Experiences range from 1 yr to 40 yrs.
Tenure	Approximately 70% of the respondents owned their land. The remaining farmers leased from the state or private owners.
Farm Size	Land sizes ranged from 1 ha to 4.5 ha. The most common size was 2 ha.
Family Involvement	All farms had a senior family member who led the activities; some had their spouses alongside their leadership. Approximately 23% are female-headed farms. All or some of the affiliated family members assisted directly or indirectly with farm operations.
No. of Generations	Most farms spanned at least one generation. Approximately 40% spanned two generations; 15% spanned no generation.
Residence	Approximately 60% of the families live on the property, another 40% live nearby.
Education	Just one farmer had no schooling; others had primary education; 30% had secondary education; and 30% had tertiary education.

Attributes	Description
Age (Owner)	The average age of the owners was 55 yrs, the youngest farmer was female and 35 yrs old, the oldest farmer was male and 69 yrs old.
Labour	Most use family labour and occasionally employ help.
Capital/Finance	All respondents relied on reinvestment capital from the farm to continue their operations. Investments were supplemented by government grants and incentives, external income which family members had and remittances from abroad.
Marketing/Disposal	Most producers relied on supermarkets and hucksters. Some retail at the city market. They would use their produce in the household when possible.
Returns from Farm to Family	The majority of producers relied on the farm's income to support their livelihood.
Government/Service Providers	The majority of producers reported not to have received any support from the Government and other service providers. Approximately 23% received support to purchase agricultural vehicles. A few producers reported receiving fertilisers from a government programme.
Community Involvement	Most respondents provided leadership in community groups.
Comments	Most producers still relied on traditional technology and most had been farming for a long time. It is possible that one respondent was not a family farmer.

Note: See detailed data in annex VIII.

4.5.4.2 Stakeholder Perspectives of Family Farms in Saint Vincent and the Grenadine



Head of household, organic family farm in Saint Vincent and the Grenadines. Photo: David Dolly, 2016.

Most of the stakeholders in Saint Vincent and the Grenadines indicated that the family farm concept existed but was not used for any exclusive policy and leadership interventions on behalf of the agricultural sector. There was never a clear distinction between the family farm and other types of farms which existed on the island. Some respondents equated the family farm with the small farm. Even so, the small farm was not clearly defined. Many stakeholders were prepared to label all their farmers 'small farmers' regardless of size of holding and volume of produce. One can conclude that the level of distinction of a family farm is vague and needs to be defined properly in Saint Vincent and the Grenadines. In trying to define a family farm, the notion of a farm that was managed somehow by a family structure over at least generations became apparent.

The stakeholders reported that not much was done for family farms during the IYFF 2014 with respect to a national effort. The greater initiatives were external. Mention was made of the outstanding first place achievement of Saint Vincent and the Grenadines in a regional poster competition. This appeared as the single most important event in the celebration alongside FAO's annual World Food Day celebration which had family farms at the centre of its international theme. This evidence suggests that the stakeholders on the island need begin to think about FF with more focus, to identify them and to especially provide a structural definition for this type of farm.

The stakeholders felt that there were specific challenges within the agricultural sector which hindered its progress and farming leadership in general. Those challenges mentioned were: the drift of youth away from agriculture in the glaring view of an aging farm population; the unavailability of productive labour within the sector; poor recognition of agriculture within the society; the failure of the education system to inculcate agricultural values within the school system; the occasional inaction by the extension services; praedial larceny; a lack of consumer education; and the difficulty to provide an enabling environment for sustainable agriculture. In conclusion, they felt that these challenges needed to be addressed in order to have improved outcomes for the country's agricultural efforts. The stakeholders also felt that a focus on the family farm was essential in the overall process. See annexes IX and X for detailed perspectives.

5. Definitions

From the field and desk studies one can discern definitions of family farms from several perspectives. This section will discuss definitions according to Latin America, Development Agencies and the Caribbean.

5.1 Latin America

There is, firstly, the perspective from Latin America. The main remit of this exercise cannot be to define family farms in Latin America as this can only be done through more extensive studies in respective countries. The remit for Latin America must also perform more detailed literature reviews. However, the reviews in this study captured viewpoints and actions from several Latin American countries as follows: Columbia, Guatemala, Ecuador, Mexico, Peru, and the MERCOSUR group (Argentina, Brazil, Paraguay, Uruguay, Bolivia and Chile, and, Venezuela).

It would seem that each country has its own approach to family farms and, since 2000, there has been renewed interest in maintaining, addressing the needs of, and defining family farms in Latin America. Several features seem to have emerged in ensuing discussions regarding a definition. These are as follows:

- The farms must engage in the agriculture sector even though many of the family farms have family members who may still be part of the non-agricultural sector
- The family unit is central to the operation of the farm, controlling the farm's major resources and providing farm labour
- The farm provides experiences which can build on future capacity and maintain cultural traditions
- The farms are heterogeneous and diversified
- Sometimes, family farms are resource poor and landless, but the family will stay together to engage in agricultural output.

The MERCOSUR group has advanced the concept of the family farm among its member countries. In so doing, it has institutionalised the developmental policy approaches to support family farms. It restricts non-farm employment to only two persons. The head of the operation must be a family member. The farm size must be 50-500 hectares. More than 50% of the income must come from the farming operations and farm capitalisation must be at a maximum US\$130,000.

5.2 Development Agencies

Development and aid agencies have had their own share of indecisiveness when it comes to defining the family farm. Most have a real dilemma separating the 'smallholder' from the family farm.

The study reflects on three definitions from three such agencies, Firstly, the International Fund for Agricultural Development (IFAD). IFAD admits to relative confusion and from its deliberations makes the case that smallholder agriculture seems synonymous with family-based agriculture. It therefore defines the two simultaneously as follows: smallholder or family-based agriculture is defined as a social and economic sector made up of farms that are operated by farm families using largely their own labour (Berdegué and Fuentealba 2012).

FAO advances the following definition: FF includes all family-based agricultural activities, and is linked to several areas of rural development. FF is a means of organising agricultural, forestry, fisheries, pastoral, and aquaculture production which is managed and operated by a family and predominantly reliant on family labour, including both women's and men's. In developing and developed countries, FF is the predominant form of agriculture in the food production sector (FAO 2014a).

The World Rural Forum (2014) makes a similar type of distinction, but, yet, is fundamentally different. This definition is as follows: FF (also family agriculture) is a means of organising agricultural, forestry, fisheries, pastoral and aquaculture production which is managed and operated by a family and ,predominantly, reliant on family labour, including both women's and men's. The family and the farm are linked, co-evolve and combine economic, environmental, reproductive, social and cultural functions.

The commonality in these definitions is in the insistence that a family unit must preside over the farming. This in turn has implications for the labour used on the farm and the ability of the farm to conform to a distinguishable social fabric which sustains traditions over a long period of time.

5.3 The Caribbean

There is the third perspective of family farms in the Caribbean as exemplified by Guyana, Haiti, Jamaica and Saint Vincent and the Grenadines. The study had its main focus here with the help of both a literature review and a field study.

As exemplified by the countries under review, the typical family farm is one where there is a generational history of active agricultural commodity production on the premises. Some of the commodities that the farm produces may be used by the household, but the majority is sold to provide both reinvestment and household income. Usually, the head of the farming household of a family farm developed an interest in and a motivation to farm under the guidance of their own parent, grandparents, older sibling or other close relatives. There is always that important motivation provided by one or more family farm members from a previous generation. There are some elements of historical attribute which link the present farm operations to a previous generation of agricultural activity. Through the generational influence, family farms are able to sustain cultural traditions and take care of the rural landscape in which they exist according to standards which they may set. Finally, the members of a family farm tend to become involved in the leadership of their communities.

There is a level of involvement of family members in the provision of labour and capital. With regard to capital, this may include pension funds, income from other professions which may reside within family, remittances from abroad and monies used from the sale of farm produce. These farms rely on family farm labour, however, some family farms may have to employ labour outside of the family. The farms show various patterns of state, non-state and private ownership, but the family's decision is essential in the use of the land for FF.

The size of family farms in the Caribbean may be classified into small, medium and large. The differences between categories are relative to land size and volume of agricultural products produced on the farm. For instance, a farm family that has access to 5 hectares of land but only cultivates 0.5 hectares may still be considered a small family farm. Even so, there is a socio-cultural idea that all farms within the Caribbean are small by international geopolitical standards. Then one may still wish to guide the size categories according to the following: small; less than 2 hectares, medium; 2-5 hectares and large; greater than 5 hectares. Each Caribbean territory will still need to determine its distinction based on its own overall land size and the volume of production in relation to contribution to agriculture's contribution to GDP.

5.3.1 Large-sized Family Farms in the Caribbean

The larger farm sizes are occupied by land owners whose traditions are aligned with larger scales of production and similar to land owners of the past who were previously engaged in the export of plantation crops. This type of large farm was more apparent in Jamaica. They are becoming somewhat extinct in the smaller Caribbean territories. Government policy in the smaller Caribbean territories usually purchase large estates then divide these estates into smaller areas for distribution to a larger number of citizens. Also, those persons who privately own these holdings in the smaller territories invariably change them into industrial and housing sites.

Large family farms are deemed more successful with well-organised business approaches. Traditionally, they occupy very arable lands and can effectively engage in expansion and increased efficiencies in their operations. The owners of these large family farms will have operations which sustain the family and also make a profit. They may make better use of a value chain approach to extend income from their operations. The owners recognise the need for targeted training and the need to instil in their children the importance of getting involved with specific training needs. Usually, at least one younger family member will return to participate in and continue the farming process.

There may be more exemplary large farms in the larger territories of Belize, Jamaica, Guyana, Suriname and, to a lesser extent, Trinidad and Tobago and Barbados, but more investigations beyond the scope of this present study will be needed in order to determine this.

5.3.2 Medium-sized Family Farms in the Caribbean

Medium-sized family farms are varied (in size) relative to the island territory. Besides the designation of a size range of 0.5-5 hectares, these farms are predicated on strong family management and labour use. However, these farms may be forced to employ non-family labour as needed. These farms may use the opportunity to engage in other activities along a value chain in order to increase farm income. They may be similar to large-sized family farms but smaller in size.

5.3.3 Small-sized Family Farms the Caribbean

The small farm is most pervasive within the Caribbean region. It is very tempting to label all small farms as family farms. This notion was often discussed by the stakeholders with whom this study interacted. However, there must be a distinguishing element which separates the small family farm and the small non-family farm. All small family farms and non-family farms become fragmented from generation to generation. As such, the children of small farmers may be inclined to move away from the land's agricultural purpose because their inheritances are too small for a productive agricultural enterprise. However, there are now numerous technologies which can make use of very small land areas and some family members still continue to choose farming. Sometimes, there are agreed arrangements among family members which allow the farming operations on family farms to continue. This is an unlikely circumstance on a non-family small farm.

5.3.4 New Entrant Family Farm in the Caribbean

In addition to the issue of size, there is the issue of the new entrant family farm. This type of farm is managed by a usually younger person and their family. This person wishes to begin a new agricultural investment. Yet, this type of entrant may be middle-aged, having left a previous profession, or older, having recently retired. If such new entrants intend to rely on the family for contributions of labour, capital, and land; one may wish to designate this farm as a new entrant family farm.



New entrant family farmer with author and IICA staff member in Linden, Guyana. Photo: David Dolly, 2016.

6. Towards Policy Development

6.1 PEST Analysis

Table 16 represents the PEST analysis which reflects the macro-environment within which the FF system would operate within the Caribbean region. It is premised on a number of issues and trends that are currently pervasive within the region's agricultural sectors and which may impact the performance of the FF system in the long term.

Table 16: PEST analysis of family farms in the Caribbean

<p>POLITICAL</p> <ul style="list-style-type: none"> • Low tax regime for agriculture is pervasive • Impact of labour policy on farming • Land policy for agriculture tending towards formalisation of ownership • Periodic changes in government which have negative implications on agricultural policies • Deregulated market environment which affect agricultural; commodity import and export • Access to adequate infrastructure e.g., public goods • Environmental factors e.g., mitigation of adverse weather condition • Rural development programs • Agricultural trade policy -Funding e.g., available capital and farm credit 	<p>ECONOMICAL</p> <ul style="list-style-type: none"> • High cost of money for agriculture (interest rates) • Delayed payments for inventories • Major competition from agricultural imports • Inaccessible export markets due to inability to compete • Untapped lucrative niche markets (organic farming) • Undeveloped regional agricultural markets • Unstable currency • Pervasive weak economic climate impacts consumer spending power
<p>SOCIO-CULTURAL</p> <ul style="list-style-type: none"> • Birth rate and life expectancy tend to be on the increase • Consumers taste and preference are specialised and sophisticated • Shift in educational interests and changes in career attitudes • Shift from the extended family to a more nuclear type • Youths find agriculture unattractive mainly due to a lack of incentives • Tangible contribution to food security and food sovereignty • Social resilience of rural communities • Rural life preserves landscape and biodiversity • Increasingly educated population and changing career attitudes • Gender relationships 	<p>TECHNOLOGICAL</p> <ul style="list-style-type: none"> • Competing or rival technology • How changes in technology will affect the progress of family farms • Research and development • Advance information technological systems • Consumers have greater access to technology -Sophisticated production means • Varied technological platforms • Data storage and transfer • Reverse innovation (initiatives initiated and driven by the region) • Smart phone and computer readily-accessible for home use • Lifespan of technology

Regarding the political factor, it is assumed that the agricultural activities within the region will continue to benefit from a low tax regime and that there will be a more formal structure to govern land tenure in the long run. Meanwhile,

it is assumed that there will be continued challenges to deal with the fallout in agriculture due to periodic changes in Government, inadequate infrastructure, de-regulated markets, adverse weather conditions, access to capital, and agricultural trade policies.

The potential for the development of niche markets throughout the Caribbean region remains untapped, thereby providing a positive outlook on the economic potential for farm families. The Caribbean must find ways to engage in agricultural production in order to take advantage of an emerging health conscious global market. However, developers and policy makers should be mindful of the high cost of credit and the instability of the local currencies that investors face. While the region's agriculture faces major challenges in gaining access to export markets, its local market is grappling to compete with imported agricultural products. This is due mainly to the underdevelopment of the regional agricultural market.

The socio-cultural environment for agriculture and, by extension, family farms in the Caribbean region also faces mixed perspectives. Despite the emerging changes in lifestyles across the region, the farm family helps to preserve strong social resilience especially in rural communities. Such a farming system encourages the individual household to focus on feeding itself, hence contributing tangibly to food security issues. Their agricultural practices are usually in sync with nature, hence preserving of the landscape and biodiversity. Developers and policy makers must be mindful that the birth rate and life expectancy in the Caribbean region is increasing and consumers' taste and preferences are becoming more sophisticated. This must be supported by more sophisticated approaches towards satisfying the food requirements and social needs of the region. A shift from the extended family type to a more nuclear family may also change the integrity of the farm family structure and should also be considered during the process of development. This may also demand better gender relations.

Regarding the technological factor, most farm families within the Caribbean have some access to the use of technology within their households. The use of smart phones and the internet are commonplace. Improved access to technology creates an enabling environment for greater efficiency in farming operations. There will be real-time interaction between the farmers and other stakeholders along the value chain. There are greater opportunities to create linkages between agricultural and non-agricultural activities within the community, thereby fostering a holistic development approach. However, the advancement in technology may pose a risk in the replacement of traditional methods if its use is not carefully considered. Therefore, while the use of technology should be encouraged during research and development, the approach should include traditional methods.

6.2 Major Benefits to Be Derived from the Development of Family Farming in the Caribbean



New grass species tested by family farmer in Rupununi, Guyana. Photo: David Dolly, 2016.

Should farm families be formalised in the Caribbean? Some benefits to be derived may include an improvement to the integrity of the farm labour force (e.g., greater commitment, trust, more structured family, improved efficiency, and apparent modelling of purposeful work by family member). This may also minimise the pilfering of resources from the farm.

There will be more efficient use of resources; stronger social linkages, or ties of the family to the wider community—supporting social events; getting more involved in social issues; farm families tend to be better stewards for the community, particularly because they are more grounded within the community and they want to see it develop around them; a tighter social connection; they tend to be seen as leaders and more prominent in the community as well.

Would the farm family provide a better platform for adopting good agricultural practices (GAP), better natural resource management; best management practice for climate change? It is very likely that the farm family will be better stewards for sustainable development than other farmers. Where the appropriate connections or linkages are made with the ideals and practices of the family farms and the benefits are apparent they are likely to adapt new interventions.

The farm family tends to be more integrated as family-centred unit. This is usually apparent at meal time, social events and in all other family occasions. The common goal of togetherness is very clear. The farm family's objectives are generally more long-term.

6.3 Improving Support for the Members of a Family Who Belong to a Family Farm

Many families are not properly served (with education, basic amenities, public goods, etc.) for several reasons, for instance geographical locations; teachers not attracted to work, lack of proper transportation, etc. There needs to be a fair and balanced approach to providing support especially to rural communities. Technology and new innovations can be transferred to the farm family through the younger members, but this becomes impossible if they are not properly educated. Meanwhile, training should be taken to the community for it to be more effective to the family farm (e.g., one could promote online marketing of produce and farm inputs.). The fundamental issue is the need to build the capacity of the farm family itself in order that it becomes sustainable. An approach could be to identify the needs for the existence of the farm family. This should be supported by strategies to sustain essential generational attributes of the farm family. One could also identify ways by which such a family unit might be strengthened. Finally, the farm family must see their operations as a business, so they need to access proper and relevant training in this regard.

In order to perpetuate this important and essential type of farming in the Caribbean region, there needs to be policies which support the maintenance of family farms and which helps these farms to be more productive. Within the region, the concept of a family farm has been loosely accepted. In both Jamaica and Saint Vincent and the Grenadines, the major state leaders in agriculture admit to little policy considerations for these farms. Hence, the first policy direction is that of providing visibility to these types of farms and in so doing distinguishing them from other types of farms which exists. Family farms are different from typical small farms although they may be small. Equally, family farms may be medium- or large-sized. In all circumstances, they possess unique characteristics which identify them as family farms.

6.4 Matrix Analysis

Table 17 provides a matrix of the final analytical perspective which could help determine policy recommendations for family farms in Caribbean countries.

Table 17: Matrix for developing policy recommendations for family farming in the Caribbean

FAMILY FARMING SITUATION	OPPORTUNITY	POLICY RECOMMENDATION
No formal accounts regarding the statistics on FF.	The agricultural census can include inquiries into the presence of FF in the country.	The next agricultural census include inquiries regarding FF. A preliminary survey (before the next agricultural census) must be carried out to determine the presence and features of FF in the country. A register of family farms must begin in each country and must be based on a local definition which is suitable for that country.
FF is ill-defined or not defined within the Caribbean.	Following the IYFF, Caribbean countries can prepare a dossier on what constitutes a family farm. This dossier can derive benefit from this present study on FF in SVG and Jamaica.	Caribbean countries can set up a protocol to identify a family farm within each country. Initially, this can be guided by the definition which has emerged in this study, but the protocol may be able to add other specific criteria deemed appropriate and within the framework of the country's context.
There are no specific efforts to sustain family farms within the Caribbean.	There are incentive and subsidy programmes which are intended to benefit farms within the Caribbean.	Specific incentive programmes can be put in place to contribute to the sustenance of family farms.
Youth present a distinct challenge to sustaining family farms into future generations.	<p>Extension services are able to manage and conduct programmes for youth.</p> <p>Telecommunication services are providing opportunities for youths to use social media platforms.</p> <p>Many family farms have younger members.</p>	Youth programmes should be developed to attract them to farming, especially with the focus on their understanding with respect to agriculture's contribution to food security and the economy. These programmes must be synchronous with the passion which youth have for social media communication.
There is no national recognition of the family farm throughout and despite the international efforts to recognise the family farm during the IYFF in 2014.	There are national events which occur annually to recognise farming and related agricultural initiatives e.g., World Food Day, Annual Agricultural Shows such as Denbigh (in Jamaica)	National events can provide a special window of recognition for the family farm through awards, competitions and other special incentives.

7. Policy Recommendations

The following Policy Recommendations emerge from the study:

1. There must be a registry of family farms within the region. Those farms within this registry will meet specific criteria which would be finalised at the end of this investigation. This registry can serve to guide policies for family farms and help to monitor such farms and their future development.
2. There is need for routine agricultural censuses which document the characteristics of family farms and their changes over time.
3. Criteria for the considerations of the qualities of family farms are as follows:
 - I. Size of operations for small-, medium- and large-scale family farms
 - II. Proportion of family household funds which routinely come in and out of the family farm.
 - III. Proportion of family labour which is employed on the farm
 - IV. Proportion of household members which makes leadership decisions on the farm
 - V. Proportion of food which is derived from the farm and used by the household
 - VI. A family tradition index
 - VII. An historical relationship index as exemplified by the number of generations which perpetuates the farm
 - VIII. An ownership index
 - IX. A community leadership index

With respect to I-IV the exact quantum of each indicator could be decided upon for each country by relevant groups of farmers and other stakeholders. The indices reflected in V-VIII could be similarly decided.

4. The State and, where possible, NGOs should offer special incentives which would serve to encourage the perpetuation of family farms. These incentives could appropriately relate to superior farm credit facilities, superior farm subsidies for the purchase of inputs, special incentives for technology innovation on family farms, and special incentives for those family farms which consistently contribute to food security.
5. There should be special policy incentives to encourage young members of family farms to learn about their family farm traditions and to feel empowered by their relationship with such farms.

6. Gender gaps on family farms must be recognised and alleviated. In this regard, both genders should be treated fairly. There should be no attempts to make one gender (especially women) invisible.
7. There is need to recognise the importance and contribution of the family farm to economic, social, environmental and cultural development, especially in rural areas of the Caribbean.
8. Developers and policy makers should effectively synchronise developmental initiatives with the culture of the farm family to ensure that the intended development captures the norms and values of the FF system. Efforts should be made to identify strategies that will include the family unit at every stage of the developmental process and to identify adaptable strategies. The family farmers are usually suspicious of outside influences. Therefore, new initiatives must be carefully coined to dispel such a belief, while those farmers are encouraged to be innovative.
9. The FF system may serve as a desirable medium through which to channel sustainable development initiatives to foster greater resource-use efficiency. The farm family tends to be more readily involved with social community issues, assuming leadership roles and being prominent community figures. This suggests that there are strong social linkages or ties of the farm families to the wider community. Thus, they are likely to be better stewards for the community, particularly because they are more grounded within the community and will advocate for its development around them. By allowing the integrative nature of the family centred unit to permeate the wider community may bring about an ideal platform of togetherness on which to build communities.

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ANNEX I: FARM FAMILY CHARACTERISTICS OF EIGHTEEN FAMILY FARMS IN GUYANA

Parameters	Respondents 1	Respondents 2	Respondents 3	Respondents 4
Type of Farm	Crop farming: ocha, bora, pepper, eggplant; corn and pumpkin	Mixed farming: Crop (coconuts, banana, plantain and tomato) and livestock (cattle, pigs, poultry and goats)	Mainly live-stock: Pigs and poultry; minimum mix crop for home consumption	Mixed farming: Mainly livestock (35 pigs, 50 ducks and 35 yard fowls); little cash crop mainly for home use
Tenure	Farm and lives on friend's land (gift)	85% leased and 15% owned	Owned	Owned
Farm Size (ha)	0.8	140	0.2	11
Family Involvement	Male owner (66 yrs) is over-all head and operating by himself; all family member migrated from the property	Father is the over-all head, manages his own plot; wife deceased; 2 children living at home help part-time. The other will help when they are available	Female owner operating full-time on farm; nephew provides part-time help	Female owner manage farm; daughter, son-in-law and 4 young grandchildren; recent passing of husband
No. of Generations	Un-classified	>3 generations – farming newly acquired land. Other brothers using the original family	Several generations occupied and farm current property	Several generations
Residence	Owner lives alone	Father has 9 children, but only one boy and one girl live with him at home. The others visit, periodically	The farmer and her nephew	Current household of 7; house and a farmhouse located on the property
Education	Secondary	Father acquired primary; children complete secondary, 2 got tertiary training	Owner obtained primary and nephew acquired secondary level	Primary for owner; daughter now at tertiary level, son-in-law has secondary; 4 children are 7 yrs and under
Age (yrs), Owner	66	51	63	57

Parameters	Respondents 1	Respondents 2	Respondents 3	Respondents 4
Labour	Takes care of his personal plot and assists his friend, periodically	Father full-time, 2 children work part-time; hire periodic non-family labour; one full-timer to see about cattle and 2 periodically to assist with land preparation	Owner is full-time and nephew is part-time; no other labour is used	Main source is the spouse (full-time); one full-time non-family labour; friends assist periodically (shared labour) periodic non-family labour for maintenance
Capital/ Finance	Income from non-farm activity and proceeds from farm	Mainly reinvest from farm; periodic loans	Reinvest from farm revenue; periodic loan from IPED and READ	Mainly reinvest from farm revenue; periodic support from IPED
Marketing/ Disposal	Able to sell about 25% of the produce through middlemen; gives away about 25%; about 50% goes to waste	Most produce is sold on domestic markets mainly through hawkers; trading is usually done at the farm gate; family eat and give away 13% of produce	Sell on domestic market mainly at the farm gate. Sell most of the pork to local Farmers Association (Perth Village, FA), Mahaicony; about 3% as gift and for home use	Weekly sale at farm gate; about 3% for home consumption and gifts
Returns from Farm to Family	About 20% returns from the farm goes to the family	Family fully dependent on returns from the farm	Rely fully on the returns from the farm	60% farm proceed; support from a variety of other areas
Government/Other Service Providers	Received no support from gov't; periodic technical support from IICA	In the event of disaster, gov't provides limited material support, periodic training; READ assist with pig pen and IICA offers training	Minimal material inputs (seeds and fertilizers) once per year from gov't; technical support from IPED, READ and IICA	No support from gov't; READ assists materially and technically
Community Involvement	Member of community organization; assist in leadership of his church	Member of farmers' association and participate in community activities	Held leadership position at church; engage on social community activities	Member of farmers association
Comments	Has been involved in farming for over 30 yrs; now ad hoc involvement	Farm operating for over 40 yrs; Low tech usage	Medium technology usage and low chemical	Farm operating for about 30 yrs; low tech usage

Note: Date on which data was compiled into table - 15 August 2016.

ANNEX I: FARM FAMILY CHARACTERISTICS OF EIGHTEEN FAMILY FARMS IN GUYANA

Parameters	Respondents 5	Respondents 6	Respondents 7	Respondents 8
Type of Farm	Crop farming: Peanuts, cassava, coconuts and various fruit trees; operating on 2 parcels	Mixed farming: Livestock (50 cattle, 45 sheep, 24 pigs and 5 horses); crops (cassava, peanuts, vegetables); operating on 3 parcels of land	Mixed farming: Mainly crop (peanut, cassava, citrus, home garden); few livestock (3 cows, 60 creole chicken)	Mixed farming: Livestock (117 heads of cattle, 31 pigs, 7 horses, 1 mule); crop (peanut, sweet corn, vegetables)
Tenure	Special lease 66% and squat on 34%	Special lease arrangement	Lease 58%; special arrangement 42%	Special lease arrangement
Farm Size (ha)	6	7.7	6.9	12.1
Family Involvement	Male owner is over-all head; spouse assists part-time; one 3-year-old daughter	Single female parent for 28 yrs; responsible for farm operation; have 4 boys who help out on the farms	Single female owner, no spouse; part-time support from 3 sons (work in gold mine and lumbering); two young grand children	Husband (owner) and wife are full-time workers; 2 children provide labour support
No. of Generations	Several	3 – took over property from parents	3 – took over from mother and grand mother	2 – father brought family to Rupununi
Residence	Owner, spouse and 1 daughter (3 yrs) currently living on the property	Owner, 4 sons and grandchildren currently living on the property	All the family members mentioned share the household, but sons are frequently out in the mining area	4 family members (parents and 2 teenagers)
Education	Secondary level for father and spouse	Primary level for parent and 4 sons have secondary level	Owner has primary level; son has secondary training	Secondary level for owner and children; primary level for spouse
Age (yrs), Owner	29	48	43	53
Labour	Owner is full-time on farm but also serves and the counselor (Toshao) for the community; spouse assist part-time	Owner manages operation; mostly uses non-family labour, either shared or hired; children assist when they are available	Owner works part-time as cook in mining area; sons work mainly in mining area and cutting lumber; 2 brothers provide periodic labour	Parents serve full-time; 2 children serve part-time; 2 non-family labourers serve 6 months; shared labour

Parameters	Respondents 5	Respondents 6	Respondents 7	Respondents 8
Capital/ Finance	Proceeds from farm	Proceeds from farm; other activities (lumbering, catering); periodic loans from IPED (lengthy process and challenging criteria)	40% reinvestment from farm; 60% IPED loan	Full reinvest from farm proceeds (maintains a business approach to operation)
Marketing/ Disposal	Sells peanuts and cassava to truckers at the farm gate about 10% for home consumption and gift	Sells locally to higglers; lumber based on order; process cassava into farine and sell to local shops; catering facility at home; about 10% for home consumption and gift	Sells to local peanut butter factory; process cassava into farine and sell to local shops; sell citrus to local school feeding program; sells chicken to villagers, periodically	All farm produce is sold on the local community market (peanut factory, few higglers); about 5% is used as gift and for home purpose
Returns from Farm to Family	Family dependent 80% on the returns from the farm; 20% on stipend from being community chief	Family dependent directly or indirectly on the farm returns (fresh produces, lumbering and value added)	About 40% farm returns; remaining 60% come from income earn from the mining industry or from logging	The farm generates 60% of well-being; 40% mainly from consultancy services with several NGOs
Government/Other Service Providers	Currently receives no direct help and support	Credit via IPED, none from gov't; minimal from other agencies	No support from the gov't and service providers; IPED loan	Technical information from NAREI, IICA, IFAD, GLDA, MOA
Community Involvement	Serves as community council, lobby gov't and other support on behalf of the community	Treasurer – Aranaputa Community Forestry Society; vice-chairman of tourism committee; serve on other organisations	Member of peanut butter factory group, and community council	Vice-chairman for village council; 15 yrs community development; initiative for SSOS (Society for Sustainable Operational Strategies); represents region 9 on several national and regional committees
Comments	Farm is being operated by fore-parents for over 30 yrs; low technology use	Operating on farm from childhood. Medium technology use	Engage in farming for more than 20 yrs; low chemical and technology usage	Engage in farming for life time; integrated farming system; minimum chemical and high technology usage

Note: Date on which data was compiled into table - 15 August 2016.

ANNEX I: FARM FAMILY CHARACTERISTICS OF EIGHTEEN FAMILY FARMS IN GUYANA

Parameters	Respondents 9	Respondents 10	Respondents 11	Respondents 12
Type of Farm	Mixed farming: mainly cash crop (cassava, banana, corn, eddoes, pineapple); 12 yard chicken	Crop farming: cassava, peanut, red bean and corn; 30 free range chicken (creole)	Mixed farming: crops (banana, plantain, eddoes, peas and sugar cane); sheep	Crop farming: cassava, peanut and corn
Tenure	Special arrangement/squatting	Special arrangement	Special arrangement	Village titled land
Farm Size (ha)	0.6	0.4	3.8 (5 parcels)	1.4
Family Involvement	Husband (84 yrs) is over-all head and spouse (72 yrs) engage full-time; 3 grown children with own farms help parents periodically; 1 daughter at home and helps full-time	Husband is over-all head; wife (24 yrs) is part-time (housewife); 3 small children (9 month, 7 yrs and 8yrs)	Male is head of household, wife does agro processing; 7 children but 4 live at home and help with farm	Both parents consider themselves part-time farmers; young children (2 of 4) help during planting
Generations	Several generations; only known way of life, children and grandchildren readily adopt it	Farm in operation for 3 yrs; but influenced by parents and other family members	4 – passed on from great grand parents	Influenced by parents and other family members
Residence	Parents and one daughter (29 yrs)	Owner, wife and 3 children	6 family members share current resident	6 family members live on property
Education	No schooling for both parents; 3 children get primary; one (boy) gets tertiary training (GSA)	Secondary level for both parents	All family members obtained secondary level except the 9-yr-old girl	Parents have secondary level schooling; children at primary level
Age (yrs), Owner	84	33	52	40
Labour	Use of entire family labour, parents full-time (sleep in hut on farm sometime); children assist with weeding, land preparation and process cassava	Owner is full-time; wife assists mainly on weekend, especially during planting, periodic shared labour	Father as manager; spouse and 3 family member assist part-time; periodic employment of 2 to 4 labourers during land preparation	Male owners manages; wife assist part-time; one non-family labourer is hired one week per month

Parameters	Respondents 9	Respondents 10	Respondents 11	Respondents 12
Capital/ Finance	Proceeds from farm only	Proceeds from farm	Reinvest from farm	Reinvest from farm proceeds; loan
Marketing/ Disposal	Process cassava into cassareep, tapioca and bread and sell to community; minimum sale of fresh produce within the community; 30% for home consumption and gifts	Sell in local village, peanut factory and in Lethem; about 5% for home use and gifts	Sell to various food businesses in Lethem; few higglers; agro processing (cassareep); farmers market; 30% as gift and for home use	Cassava processed and sold as farine and cassareep in Lethem; peanut butter processing centre in Lethem
Returns from Farm to Family	90% dependence on the farm; pension and children provide 10%	Family dependent fully on the returns	About 90% farm returns; remaining 10% come from stipend receive as Community council	60% dependence on farm; 40% from logging and other sources
Government / Other Service Providers	No gov't support; technical support from Wowetta Women's Agro-processing Group (WWAG)	Infrequent technical support from NAREI	In-frequent support from gov't (inputs), NAREI, Conservation International (CI), KMCRG (Kanaco Mountain Community Representative Group)	Periodic support with pest control from NAREI
Community involvement	Member of WWAG for 8 yrs	Member of village council; community soccer team	Captain (Toushao)/leader of community council	Member of community volley ball team; makes donations to community activities
Comments	Randomly selected lot in the forest and farm; operating for over 60 yrs; no chemical use and low technology	Community is based on traditional farm families then grew up as a farmer	Engage in farming for over 40 yrs; low chemical and technology usage	Engage in own farming for 10 yrs but grew up on farm; low chemical and technology usage

Note: Date on which data was compiled into table - 15 August 2016.

ANNEX: I FARM FAMILY CHARACTERISTICS OF EIGHTEEN FAMILY FARMS IN GUYANA

Parameters	Respondents 13	Respondents 14	Respondents 15	Respondents 16
Type of Farm	Crop farming: cassava and bananas; kitchen garden for home consumption	Crop farming: cabbage, bora and sweet pepper; seedling production	Mixed farming: cash crops; livestock (1500 broilers)	Mixed farming – Crops (sweet potato, yam, cassava, vegetables); livestock (chicken, ducks and bee)
Tenure	Village titled land (free/ leased)	Leasehold	Leasehold (3 parcels)	Leasehold
Farm Size (ha)	1	0.4	11.3	0.9
Family Involvement	Husband (head) and wife are part-time; of 8 children, 2 currently live and work in Brazil, 1 works full-time on the farm and the others part-time	Husband is overall head; wife (39 yrs) full-time; 2 other family members who help part-time	Male (head) and wife are full-time; 1 daughter in charge of marketing, 1 involved part-time; 1 lives abroad (farming for 15 yrs)	Husband-owner (67 yrs), wife (60 yrs); 4 children, but all moved out except 1; owner full-time, and one daughter helps part-time
Generations	Family tradition	Family tradition	Never grew up on a farm, got involved via business training course; entire family is now involved	2 generations – received farm from father; might be more family history
Residence	Parents and 6 children live at home	Owner, wife, sister and another family member	Renting home 3 miles from farm	Husband, wife, and one daughter
Education	2 got secondary level; parents and remaining 6 children got primary level schooling	Sister and other member got secondary level; parents have primary level	Owner has tertiary level; spouse and 3 daughters have secondary level	Owner has tertiary; wife had primary level; all children are secondary level
Age (yrs), Owner	52	45	44	67
Labour	Owner is part-time (operate tractor); spouse is part-time (house wife); one son full-time and other part-time; rarely employ non-family labour	Owner and wife are full-time; other 2 member are part-time; no report of non-family labour	Except 1 daughter, the whole family is involved; non-family labour - 7 full-time and 3 part-time	Owner does most of the work; wife does part-time mostly with marketing; the children help out especially during land preparation; rarely use non-family labour

Parameters	Respondents 13	Respondents 14	Respondents 15	Respondents 16
Capital/ Finance	Proceeds from farm; recycle planting materials	Proceeds from farm	Use 30% loan for start-up; now farm self-sufficient with 20% reinvestment	Only reinvest from farm proceeds
Marketing/ Disposal	75% local markets, mainly in Lethem; 25% use by the family or as gift (make farine)	Sell at farm gate to higglers; use 1 % for home use and gifts	Market under own label (Fresh From the West) and market structure; sells locally; 5% use for household and gifts	Retail and wholesale at the farm gate; wife sometimes take a portion to the local market; about 15% is used as gift and for home use
Returns from Farm to Family	70% from farm; 30% from tractor driving and remittance from children	Family dependent fully on the returns from the farm	Family relies on 100% farm returns	About 90% reliance on the farm; periodic remittance from children
Government /Other Service Providers	No help generally; Village Council assists periodically with land preparation	Receive no support	Infrequent extension support from gov't; IICA, FAO help with drip irrigation	Financial support from IPRD and READ; training from NAREI
Community Involvement	Father is member of community council, Catholic Church; last 2 children in groups	Member of West Watooka Farmers Civil Development Council (WWFCDC)	Member of local farmers' association, and Linden Chamber of Commerce	President of WWFCDC; Leadership role in Church

Note: Date on which data was compiled into table - 15 August 2016.

ANNEX I: FARM FAMILY CHARACTERISTICS OF EIGHTEEN FAMILY FARMS IN GUYANA

Parameters	Respondents 17	Respondents 18
Type of Farm	Mixed Farming: crop (cassava, plantain, passion fruit and pepper); livestock (65 duck)	Crop farming: pineapple and cassava
Tenure	Special lease (village council); 2 parcels	Special lease (village council); 2 parcels
Farm Size (ha)	1	1.2
Family Involvement	Husband (34 yrs) is overall head; spouse (33 yrs) assist full-time; a 3-yr old son	Husband (overall head) and wife works full-time on the farm store; daughter full-time; 5 children (3 adults and 2 teenagers) all assist on the farm
Generations	2 generations – acquired 0.4 ha property from parents; children not showing interest	3
Residence	Owner, spouse and 1 son currently living on the property	Husband and wife and 6 children; 4 grandchildren
Education	Owner has tertiary level and wife has secondary level	Primary level for parents and 3 children primary level and 3 secondary level
Age (yrs), Owner	34	59
Labour	Owner and spouse are full-time; hire non-family labour periodically especially during land preparation	All the children participate in the farming operation; support parents; employ non-family labour, periodically
Capital/ Finance	Proceeds from farm; logging; personal savings	Proceeds from farm; logging and from other jobs
Marketing/ Disposal	Sell mainly at farm gate to higglers and villagers; 60% for home consumption and gift	Region market; community members; agro processing; cassava factory; consume 5%
Returns from farm to family	20% from farm and 80% from logging and stipend for being Toshao	25% from the farm; 75% from logging and other activities
Government /Service providers	Periodic support from IICA; Women Agricultural Diversification Network (WADNET)	Limited support from Government; NGOs provide assistance
Community involvement	Captain for the village; seek community assistance	Church member, members on council; chairperson for farmers group
Comments	Operating for over 10 yrs; medium technology use	Operating for about 35 yrs; low technology use

Note: Date on which data was compiled into table - 15 August 2016.

ANNEX II: STAKEHOLDER PERSPECTIVES OF FAMILY FARMS IN GUYANA

Workshop Constituents

In Guyana, the stakeholders were assembled at a morning workshop which discussed the issues related to FF. The workshop was conducted in a two-hour session. There were representatives from a cross-section of personnel involved in the conduct and leadership of Guyana's agriculture. IICA organised the event. Stakeholder representatives came from the following organisations: The 100% OAFM, FAO, Guyana; GLDA; GMC; IICA; local agricultural consultants; Mocha Block B Farmers Association; NAREI; Partners of the Americas (Guyana Chapter); Rich Milk Dairy Enterprise; WDAA; and WUSC.

Categorising Family Farms in Guyana

There was consensus among the stakeholders that about 75% of all farms in Guyana may be categorised as family farms. This is because majority of the farmers in Guyana rely solely on the farm for their livelihood and they are usually operated by families. Four (27%) of the respondents, however, believed that all small farmers are family farmers, while the other 11 (73%) are of the perspective that all family farmers are not necessarily small farmers. They claimed that not all small farms are family farms based on the fact that they may not own the property on which they operate. Meanwhile, some small farmers rely on non-family members to make major decision about the farm. Some also share ownership of the farm enterprise with non-family members. There are farmers who are in commercial type operations and rely heavily on hired labour. Some respondents expect that all the labour force must be provided by family members in order for such farm entities to be considered family farms. There are instances where there is only the owner who does everything with no support from other family members.

Four (27%) of the respondents did not believe that medium and large farms were family farms as well for a number of reasons. The managers of large farms tended not to have any blood relation with their employees. Also, there might be part-owners of such farm entities that were not family members. The other 11 respondents (73%) believed that both medium and large farms were likely to be family farms as well. This is because many of these farms are well-structured around a strong family network where every member relies fully on the farm for a livelihood. They do not employ non-family members as managers or major operating officers. Some of them will employ non-family labour as minor operators. The family members are involved in the decision-making, production and the marketing processes. The children are carefully groomed to take over the farming business.

Supporting Members of a Family who Belong to a Family Farm

Many respondents were of the view that by exposing the members of farm families to relevant training and improved technology could improve their development. They believed that agricultural-based institutions should seek to work closely with

family farms by providing technical support. Service providers should consult with farm families in order to design and implement relevant programs that target specific needs.

Farm families should have the appropriate infrastructure to bolster their progress. There should be proper access roads and irrigation facilities. These farmers should have increased access to GAP and agricultural credit. For instance, the GMC can facilitate and coordinate extension activities to disseminate marketing information. This is to strengthen the support provided for the farmers since they are predominantly located in the rural areas and access to vital information is usually insufficient. Family farmers, therefore, should be provided with ready access to information. These farmers may also benefit from proper incentives, such as inputs and marketing facilities.

Major Problems Facing Family Farms in Guyana

The majority of the stakeholders cited issues around marketing as the major challenge faced by family farmers in Guyana. Family farmers do not adopt new farming techniques readily due to their strong connections to traditional methods of farming. It is, therefore, challenging to get family farmers to recognise the need for vital information on improved crop varieties, techniques, marketing strategies, and opportunities. They continue to engage in substandard practices which yield low returns. The lack of incentive to farming became unattractive to their children and the parents are not willing to motivate them. Other problems are: inadequate land tenure system; limited or lack of access to finance; inability to expand their operations; low labour availability to the sector due to inability to compete with the mining sector; inadequate research and development; inadequate processing facilities; postharvest management, value added and packaging; praedial larceny; high input costs; and the absence of strong farmers support groups. Another type of problem is that the evident territorial attributes of the family farmers tend to limit the mutual sharing of information and access to service providers.

Support Provided by Stakeholders to Improve and Sustain Family Farms in Guyana

Some stakeholders claimed that they provide technical support through training; brochures; farm visits; input support; and capacity building through organizational strengthening. For instance, the GMC provides support by creating marketing linkages; market information (availability, price, postharvest techniques); resources, such as crates to reduce postharvest losses; packaging facilities to support export of non-traditional commodities. The Ministry of Agriculture, through its various departments, provides extension services; improved breeding stock; health care; and assist in group formation. They also help to organise farmers into clusters so as to improve their capacity to supply larger markets. Partners of America provide small loans to assist with major land preparation; training in financial management; and targeted research to improve product quality and quantity.

Major Problems Facing Agriculture in Guyana

According to the stakeholders, some major problems facing agriculture in Guyana include praedial larceny; limited and inadequately trained/skilled workers; high import cost; inadequate marketing facilities; untargeted research and development; lack of access to funding; high cost of production; climate change issues; poor management; and uncommitted Government support staff. One respondent cited non-tariff barriers as major agricultural problem in Guyana.

Highlights of Support Provided by Stakeholders to Sustain Agriculture in Guyana

Some of the respondents claimed that they assisted with equipment and infrastructure; technical support; encourage farmers to continue farming; provide market information and agribusiness development support; promote FFSs; and offered training and technical advice. WDAA claimed that they assist with organising markets and establishing linkages along the value chain; help to source funding as build a processing plant. FAO engages in policy support for youth engagement in agriculture.

Awareness of the International Year of the Family Farm (IYFF) IN 2014

Ten (66%) of the 15 respondents did not know about of the IYFF launched in 2014 and, as such, were unable to identify anything in recognition of such an event. Of the five (33%) organisations that were aware of the 2014 event, FAO hosted workshops to sensitise farmers about the concept of family farms. NAREI reported that seminars and trade fairs were conducted at the Ministry of Agriculture and other agencies to promote the concept. The other three respondents did not do anything to recognise the event.

ANNEX III: FARM FAMILY CHARACTERISTICS OF TWELVE FAMILY FARMS IN HAITI

Parameters	Respondent 1	Respondent 2	Respondent 3	Respondent 4	Respondent 5
Type of Farm	Crop farming: vegetables	Mixed farming: vegetables/mall livestock	Crop farming: vegetables	Crop farming: vegetables	Mixed farming: vegetables/large and small livestock
Tenure	1 parcel owned; 5 parcels leased	6 parcels owned	4 parcels owned/2 leased	1 parcel owned; 1 parcel leased	3 parcels owned; 5 leased
Farm Size (ha)	2.5	10 (2.5 cultivated)	1	0.5	2.5
Family Involvement	Works with wife, no children	Works with wife and 8 children	Works with wife, 4 children helps on weekend	Works with wife, 1 of 5 sibling helps	Works with wife, small children, plumber/electrician
No. of Generations	2	2	2	3	1
Residence	Live on farm	Live on farm	Live on farm	Live on farm	Live on farm
Education	Primary level	Primary level	No schooling	No schooling	Secondary level
Age (yrs), Owner	34	59	48	60	45
Labour	Farm full-time	Farm full-time	Farm full-time + 5 occasional	Farm full-time + 4 occasional	Farm full-time + 10 to 15 occasional
Capital/ Finance	Sale of produce/Social bank	Sale of produce/Social bank	Sale of produce	Sale of produce	Sale of produce
Marketing/ Disposal	Local and city market	Farm gate, local and city market	City market	City market	City market
Returns from Farm to Family	Relies on income to support family	Relies on income to support family	Relies on income to support family	Relies on income to support family	Relies on farm income. Sometimes receives remittances from abroad
Government/ Other Service Providers	No gov't assistance, tech advice from IICA	Some gov't support, tech advice from IICA	No gov't support	No gov't support, tech advice from IICA	No gov't

Community Involvement	Spouse in church group	None	Spouse in church group	None	Both partners in church group; in the leadership of two other community groups
Comments	All farms tend to have many parcels	Many have large families	Religion is very important in most of the families	Children now have their own farms elsewhere	On all farms the women do the marketing

Note: Date on which data was compiled into table - 15 August 2016.

ANNEX III: FARM FAMILY CHARACTERISTICS OF TWELVE FAMILY FARMS IN HAITI

Parameters	Respondent 6	Respondent 7	Respondent 8	Respondent 9	Respondent 10
Type of Farm	Mixed farming: bananas; vegetables; large and small livestock	Mixed farming: bananas; vegetable; small livestock	Mixed farming: tree crops; vegetables; large and small livestock	Mixed farming: bananas; vegetables; small livestock	Mixed farming: rice; vegetables; large and small livestock
Tenure	2 parcels owned; 1 parcel leased	4 parcels owned	6 parcels owned	2 parcels owned; 1 parcel leased	3 parcels owned; 1 parcel leased
Farm Size (ha)	3	1.25	8	0.6	0.5
Family Involvement	Works with 16 family members (including, grand-children) involved + carpenter	Works with wife, 3 small children	Works with 7 family members + village security, retired army soldier	Works with spouse and wife, only has a small 3-yr-old	Works with wife, has 3 small children
No. of Generations	2	2	2	1	3
Residence	Live on farm	Live on farm	Live on farm	Live on farm	Live on farm
Education	Primary level	Primary level	Primary level	Secondary level	Secondary level
Age (yrs), Owner	64	60	50	35	42
Labour	Family labour + occasional force of 10	Family labour + occasional force of 9	Family labour + occasional force of 10-14 labourers	Family labour, sometimes shared labour from friends	Family labour + shared neighbourhood labour
Capital/ Finance	Sale of crops and livestock	Sale of crops and livestock	Sale of crops and livestock	Sale of crops, tailoring, wife's teacher's salary	Sale of crops
Marketing/ Disposal	City market	Local market	Local market; farm gate	City market	Sold to a miller, wife does extra marketing
Returns from Farm to Family	Relies on income to support family	Relies on income to support the family	Relies on income, pension, Credit from Jacqmel co-op	Relies on income from farm + tailoring and teaching	Relies on farm income
Government/ Other Service Providers	IICA and banana sucker support programme	Training from the Ministry of Agriculture	IICA, Minimally from the gov't	Nil	Fertiliser from gov't, occasionally
Community Involvement	Both partners have their own religion, belong to community group	Nil	Children in church choir, church, and community group	Secretary of community group, church choir	Belongs to the rice association, Jehovah Witness
Comments	Large family, different religions	Late start family	Active in community	Active in community	Rice growing is integrating

Note: Date on which data was compiled into table - 15 August 2016.

ANNEX III: FARM FAMILY CHARACTERISTICS OF TWELVE FAMILY FARMS IN HAITI

Parameters	Respondent 11	Respondent 12
Type of Farm	Mixed farming: rice vegetables; small and large livestock	Mixed farming: rice; vegetables; large and small livestock
Tenure	4 parcels owned; 1 parcel leased	4 parcels owned
Farm Size (ha)	16.5	2.2
Family Involvement	All 30 siblings and parents	All 10 siblings and parents
No. of Generations	3	3
Residence	Live on farm	Live on farm
Education	Primary level	Secondary level/technical
Age (yrs), Owner	72	55
Labour	Family and hired – up to 12 people on occasion	Family and hired up to 5 people
Capital/Finance	Sale of produce, buying and selling rice; their occupation so salaries; loans and remittances	Sale of crops and livestock; loans
Marketing/ Disposal	Farm gate sales; local and city markets; sell rice to miller	Farm gate sales and city market; sells rice to miller
Returns from Farm to Family	65%, rest comes from the farm; the rest comes from other occupations of children	Relies on farm income to support family; some occasional remittances from abroad
Government/ Other Service Providers	Nil	Nil
Community Involvement	Church, community groups, IICA	No community group attachments, sometimes his neighbourhood members get together to clean drains
Comments	One of the more successful family farms in the entire survey in the 4 countries, high community leadership	Still seem to have much community leadership

Note: Date on which data was compiled into table - 15 August 2016.

ANNEX IV: STAKEHOLDERS PERSPECTIVES OF FAMILY FARMS IN HAITI

Discussions were held with two senior members of the state-run services for agriculture in Haiti, namely, the Director of the Cabinet of the MARNDR and the Head, Innovation, Research, Training in Extension, MARNDR. As was done in the other countries, this discussion was guided by a set of predetermined questions (see annex XII). The interview also focused on the general state of agricultural activities and development in the country.

From the onset, it was suggested that family farms were always in existence in Haiti. While, there is some new and desired focus on the family farm by international agencies, it really is not new. So, it was made very clear that the family farm is the main type of farm in the country. It was also acknowledged that the family farm is synonymous with the “small” farm and that 95% of the farms in Haiti are small family farms. It seemed impossible to separate the two concepts. Yet, small family farms may be small, medium or large in size (i.e., < 1 ha, 1-2 ha and > 2 ha). Small is therefore seen as a complex of features and not only the size factor. A key to identifying these farms is their use of family labour. Family labour is not exclusive as these farms must still employ other sets of labour especially during specific periods of cultivation.

These farms use their own finances and usually have intense cultivation activity. They would invariably practice a mixed production system of livestock and crops. It is a system which sees the agricultural commodities as a type of bank savings.

In Haiti, the family farms cultivate different parcels in different cultivation/climatic zones. This helps to combat climate changes as one parcel may become affected by a climate change and the other might not. In both cases, there are implications for the type of crops and the type of traditional cultivation practices.

Because family farms form the basis of the country's agriculture and because they account for 40% of agricultural exports, it is important to put policies in place to support FF. The country is trying to make law, the recognition of the farmer as a producer and a professional.

Juxtaposed with the small (family) farm is the large producer who engages in a very commercial operation, sometimes called an agribusiness operation. There is also a new ‘buzz’ pertaining to trying to make the small farmer an agribusiness person. While this is important, there is still need to carefully categorise who is not FF from who is doing an agribusiness operation.

These large producers are the focus of special policy initiatives which encourage them to embark on large scale agricultural production projects which can provide food security and help earn additional foreign exchange. The country is zoned for these activities and the commodities which are involved are sisal, corn, rice, beans, bananas, pigs and oil palms.

Many problems were identified and it was suggested that the new policy and objective frameworks could help to resolve them. The problems and challenges were as follows:

Climate change; drift of youth away from agriculture; rural-urban migration; loss of agricultural lands to housing; soil erosion; farmer training; occasional shortage of labour.

- I. The MARNDR is mindful of these problems and its latest strategy is as follows:
- II. Reorganising of internal policies
- III. Development of an agribusiness unit
- IV. Development of infrastructure, particularly roads and irrigation
- V. Assistance to FF in Haiti

With respect to FF, several specific problems warrant assistance. These are:

- I. Responses to climate change
- II. Agricultural insurance
- III. Availability of water
- IV. Availability of credit
- V. Poor pricing at the market place
- VI. Technical assistance to stop diseases, improve planting material, etc.

ANNEX V: FARM FAMILY CHARACTERISTICS OF EIGHT FAMILY FARMS IN JAMAICA

Parameters	Respondent 1	Respondent 2	Respondent 3	Respondent 4
Type of Farm	Livestock farming: 100,000 broilers, 45 beef cattle, 60 pigs, 130 sheep, meat shop; 44 yrs	Mixed farming: root crops, vegetables, broilers, pigs; 40 yrs	Crop farming: breadfruit, ackee, plantains, table sugarcane, root crops, vegetables; 14 yrs	Mixed farming: breadfruit, bananas, ackee, table sugarcane, root crops, vegetables, coffee, legumes, broilers; 20 yrs
Tenure	Freehold	80% freehold, 20% lease	60% freehold, 40% leased	10% freehold, 90% leased
Size (ha)	7.5	34.5	6.25	4
Family Involvement	Father, mother, daughter, nephew	Father manages his plot, mother post-harvest operations, 3 sons manage individual plots, common marketing, input purchases, transportation	Father is overall manager, periodic tractor operator, mother is a retired teacher who assists, 2 grandsons help, have their own plots	Female owner and spouse manage farm, siblings (49, 28 and 24 yrs old) help full-time, Other family members (27, 26, 21, 20 yrs old) part-time, 4 grandchildren
No. of Generations	3	3	3	4
Residence	Live on the farm, his parents also	Live on the farm	Live on farm	Live on farm
Education	Secondary level (4), tertiary level (1)	Father and mother – primary level; sons – tertiary level	Owner, Grandchildren –secondary level, spouse and children - tertiary level	Managers – primary level, children – secondary level
Age (yrs), Owner	59	58	69	49
Labour	Full-time manager, father, mother, daughter, nephew, occasional employment of labour	Father and 2 sons fulltime, 1 son part-time, mother does marketing, occasional hire	Owner is full-time, wife–part-time, occasionally employ labour, but it is difficult to get	Owners and family members offer full-time labour, occasionally employ labour
Capital/ Finance	Bank loans and proceeds from farm	Reinvest from farm sale, farm creditor	Reinvest from farm sales	Reinvest from farm revenue

Parameters	Respondent 1	Respondent 2	Respondent 3	Respondent 4
Marketing/ Disposal	Contract with Jamaica Broilers, meat shop, family, gifts	Export some root crops, has a hotel market, retailers, hucksters eat < 1%	Hucksters, retailers, 3% as gifts, eat 1%	Sells coffee at depot, sells broilers to schools, retail at local market, eat 3%
Returns from Farm to Family	Family dependent on returns from the farm	Depends fully on farm returns. One brother additionally - a banker	70% returns from farm, remittances, pension, part-time musician	90% proceeds come from farm. Some members have other part-time employment
Government/Other Service Providers	Vehicle concession, tech support from Jamaica Broilers	Limited tech support from RADA	Limited tech support from RADA and help after natural disasters	Limited tech support from RADA, IICA and Ja REEACH
Community Involvement	Pig farmers association, donations to schools and events	Church group and community group	Former Jamaican Agricultural Society (JAS) representative, church leader	Farmers group, church group
Comments	High technology usage, long-standing family farm operation	Low technology usage, long-standing family farm operation	Low technology usage, long-standing family farm operation	Low technology usage, long-standing family farm operation

Note: Date on which data was compiled into table - 15 February 2016.

ANNEX V: FARM FAMILY CHARACTERISTICS OF EIGHT FAMILY FARMS IN JAMAICA

Parameters	Respondent 5	Respondent 6	Respondent 7	Respondent 8
Type of Farm	Mixed farming: beef 28 ha) small livestock (0.4 ha) mixed crops (3 ha) sugarcane (40 ha); 30 yrs	Mixed farming: small livestock (2 ha) sugarcane (18 ha) mixed crop (3 ha); 50 yrs	Crop farming: coffee, vegetables, root-crops, agro-processing	Mixed farming: root crops, vegetables, pigs, goats, beef
Tenure	Leasehold	Freehold	Freehold	Freehold
Size (ha)	68	20.4	1.2	14
Family Involvement	Father is full-time, spouse is a teacher and assist part-time, 1 son helps full-time, remaining 4 daughters and 1 son unavailable	Father is full-time, Wife manages farm store; 1 daughter- full-time; 5 other siblings not involved	Female owner without a spouse. Full-time support from 4 adult siblings, a sister and a nephew	Husband and wife full-time owner, Full-time support from one son and two grandsons
Generations	2	2	2	4
Residence	Live on farm	Live on farm	Live on farm	Son lives on farm house, others live nearby
Education	Father – secondary level, sons and 4 daughters – tertiary level	Mother, father – secondary; siblings – tertiary level	2 Members primary level; 4 members –secondary level; 2 members – tertiary level	Owner – secondary level, son –secondary level, wife- primary level, others – tertiary level
Age (yrs), Owner	59	76	61	72
Labour	Father provides full-time labour, Spouse – part-time, hires labour occasionally	Father and daughter – full-time Spouse – part-time, hires labour occasionally	Female sibling is manager, family is main labour force, but they hire labour at harvest and during land preparations	Son manages, parents serve full-time; 2 part-time family members, employ occasional labour
Capital/ Finance	Proceeds from farm, EU/Sugar corporation crop lien support	Proceeds from farm, PC Bank support, EU/ Sugar Corporation	Reinvest from farm proceeds	Reinvest farm proceeds

Marketing/ Disposal	Contracts with Juicy Beef, sugar estate and local market; < 1% home consumption	Sugar estate, hucksters, 5% home consumption	Coffee sold to depot, family member sells fresh produce at local markets, 10% gifts and home use, process small amount of coffee	Farm sales through hucksters, 3% gifts
Returns from Farm to Family	Family dependent fully on the returns from the farm	Family dependent on returns from the farm and farm store	95% returns support the family, the remaining 5% comes from other remittances	Farm is only source of income for the family
Government/ Other Service Providers	Credit facility via Cane Farmers Corporation	Credit inputs via the Cane Farmers Corporation	Limited tech support from RADA and the Jamaica Coffee Board	RADA, EU, Ja REE-ACH and USAID projects
Community Involvement	Chairman, Cane Farmers Corporation	Justice of Peace, Former Chairman of the Cane farmers corporation, church leader	Former Chairman of the Cane farmers corporation, church leader	Farm used for On Farm Adaptive Research (OFAR)
Comments	Longstanding family farm, low technology	Longstanding family farm, medium technology	Longstanding family farm, medium technology	Longstanding family farm, medium technology

Note: Date on which data was compiled into table - 15 February 2016.

ANNEX VI: DISCUSSIONS WITH STAKEHOLDERS FROM THE STATE AGRICULTURAL SERVICES IN JAMAICA

Agriculture and Food Security in Jamaica

The stakeholders involved in this discussion were the Principal Director of the Planning and Policy Division, the Director of Data Bank and Evaluation, two Agricultural Economists and the Policy Administrator of the Ministry. RADA was invited to participate, but, unfortunately, it was unable to do so. Nonetheless, it is hoped that its views will be represented since RADA works in tandem with the other participants in the study. During their deliberations, these stakeholders identified several areas where the family farm concept may provide support in addressing the food security issues of Jamaica. For instance, the perceived benefits to be derived from the development of family farms in Jamaica may extend beyond the boundaries of the farm unit to the wider community, hence providing a more desirable approach to address major food security issues. The sense of land ownership among these farmers offers a positive impact to the status of agriculture in Jamaica. By developing the FF system, the family will be integrally involved in all aspects of the farming operation through labour distribution and the sharing of other resources. There will also be a sense of community as different family farm units may share labour and resources among themselves. Current farming methods will be enhanced due to the engagement in good agricultural practices and greater access to farm credit.

The essence of the generational aspect of the family farm may serve to promote the preservation of land for the use of agriculture. Here, the family recognises that the land is important for the perpetuation of its tradition. This will discourage segmentation of the land.

The stakeholders also identified some issues that may impact negatively on food security in Jamaica. They contend that the segmentation of agricultural land tends to be more apparent among the smaller farmers. These farmers will subdivide their lands for their children, thereby rendering their farming operations to be less efficient. Meanwhile, the land that is shared is often not used for agricultural purposes.

The majority of the farmers in Jamaica operate on marginal lands that are infertile and have limited accessibility. While these farmers might be able to sustain some basic needs from their properties, they are unable to engage in effective expansion planning and the more extensive type of activities like the larger farmers. They face major challenges to practice effective crop rotation or to engage in other GAP. They are unable to satisfy the basic requirements for efficient agricultural operations.

In Jamaica, the general attitude towards agriculture is negative, especially among the smaller farmers. While many small farmers continue to be engaged in the practice, they do not encourage their children to be involved. This may have re-

sulted from the marginalised method of farming among this group. The larger farmers tend to be more productive. They own the larger land areas that are more arable and are believed to be aligned with the larger land owners of the past. The island is now challenging the outcome of making agriculture more attractive especially to the youth.

There are instances where more young people are gravitating towards agriculture as a business. It might be that the practice has more to offer due to education. These younger operators are more mindful of the level of returns they are able to get from their family farms.

Smallholder Farming in Jamaica

In Jamaica, more than 80% of the farming population are considered smallholders with less than 2 hectares of land. These are usually marginal lands with extreme slopes, infertile soils and poor accessibility. As such, these lands offer major disincentives to farming. The initial perception of this group of stakeholders was that the term family farm may be used interchangeably with small farmers. They were of the opinion that all family farmers were small farmers until the deliberations on the topic brought about by this study changed their perspectives.

The Family Farm in Jamaica

The stakeholders from the Ministry of Agriculture reported that there was no established definition for family farms in Jamaica. To them, a family farm is a farm entity that has a type of family cooperative structure by nature. This includes the use of family labour, perpetuating generational values and traditions and the reflection of strong attachments or bonding among its members.

During the discussions, the respondents identified three categories of family farms in Jamaica. Firstly, there are the large family farms that are controlled by family members with strong generational ties especially at the ownership and management levels. Examples of such entities include Jamaica Producers, Jamaican Broiler, McConnell, the Turners, and Worthy Park. Secondly, are the smaller family farmers who are not as organised like the larger entities? They sometimes will get the children to be involved in selected farming operations, such as feeding the livestock, sowing seeds, and harvesting produce. The children understand that the proceeds from the farm cater to their livelihood. Thirdly, there are the new entrant family farms. These entities do not have a generational attribute, but they are in the process of doing so. They are new entrant farmers who enter the practice with their entire families, engaging to some extent in the farming operation. Decisions are made jointly with the family members. This category of family farm tends to be more predominant among new and younger farmers.

The major highlight of the FF system is the cheaper cost for labour due to the predominance of family labour. Notwithstanding, both paid and unpaid labour is used in the characterisation of these farms. There is also the element of trust, ownership of

assets, shared interest, the sense of inclusiveness in all aspects of the operation and connectivity.

Agricultural Policy and the Family Farms in Jamaica

The general feeling among this group of respondents is that it might not be necessary to establish policies specifically for family farms in Jamaica. They believe that the majority of the farms in the island are family farms; and therefore they would be benefiting from existing agricultural policy. As such policy directives may be adjusted to accommodate some new principles of the emerging family farm concept.

Some major policy highlights include the offering of incentives by Government to FF operations which foster commitment, reliability, and sustainable agricultural practices. Loans may accommodate their special conditions. Policies can provide and channel subsidies not only to agricultural development but general community development initiatives. By infusing the FF concept with general agricultural development strategies, one may be able to re-direct the essential purpose food security, which is to feed the family in a sustainable way. The FF system will serve as an important pathway through which more families are encouraged to feed themselves.

Other policy directives may include the empowerment of family farmers. Effort should be made to include them in the policy development process. This will encourage a sense of ownership among these farmers. They should be appropriately recognised for their contribution to the development of the agricultural sector and be provided with desirable safety net against natural disasters. There should be innovative access to farm credit or to secure capital through flexible financial programmes, for instance, using a broad range of collaterals, accepting non-traditional methods of credit securities and creating more flexible credit portfolios. Finally, policy could revise existing agricultural land ownership and distribution and in so doing accommodate informal land tenure among family farmers.

ANNEX VII: DISCUSSIONS WITH STAKEHOLDERS FROM NON-GOVERNMENTAL ORGANISATIONS IN JAMAICA

Agriculture and Food Security in Jamaica

Four NGOs participated in the discussion on separate occasions. Their responses are summarised in this section. The JSIF was represented by a Project Manager and a Project Officer of its Rural Economic Development Initiative (REDI). Two Senior Programme Advisors and a Programme Advisor represented the Ja REEACH project. FAO was represented by its local country representative. The Rural Development Specialist and the Agribusiness Specialist of IICA Jamaica also participated. Collectively, these stakeholders did not know of any established definition for family farms in Jamaica and attempted to equate family farms with small farms.

The respondents cited several ways that the family farming system in Jamaica may impact food security. They believe that the collective use of family labour may help to improve the integrity of the farm labour force due to greater commitment; trust; more structured family units; improved resource-use efficiency; and the modelling of purposeful work by family members. This may also minimise the pilfering of resources from the farm. The farm family is likely to be better stewards for sustainable development when compared to other farmers. They readily adapt to new interventions whenever they are appropriately connected to their practices and consequent benefits are apparent.

The impact that strong family support through remittances has on food security in Jamaica might be two-fold. On the one hand, the dependence of the family on the farm itself may decline, rendering it less significant to their wellbeing. On the other hand, if the farmer is truly interested in the farming activity and it is positioned to be a meaningful contributor to his/her livelihood, he/she will not hesitate to invest the additional money received. Generally, the farm family exhibits a deep sense of commitment to what they do. Ja REEACH shared that, from a recent study, they observed that the ownership of land appears to be a strong element in keeping the farm family connected. The study revealed that those farmers who owned their properties were more willing to participate in sustainable development initiatives, such as planting trees, long term crops, and engage in extensive soil conservation practices. Where the sense of ownership was lacking or there were disputes over land, the willingness to build adaptations to climate change was not apparent.

The participants believe that some parents deliberately discourage their children from being directly involved the farming operations. Why do they take this position and how can that change? The parents may not consider farming to be a worthwhile venture and believe that there might be better alternatives elsewhere for their children where they may not have to work as hard.

Smallholder Farming in Jamaica

In Jamaica, about 80% of rural folks still rely on agriculture as their main stay and many of them fall within the family farming system. Meanwhile, several family members are benefiting from the proceeds of farming, while being unemployed and not helping on the farm. Therefore, a large amount of the potential farm labour force is not being utilised. Where the farm is located, usually impact the individual's view and attitude towards farming in Jamaica. For instance, the farmer who operates on the hillside usually has a more negative perspective than one who operates the plains. This is because of the marked difference in accessibility to market, irrigation water, roads, transportation, and other resources.

There are several support programmes geared towards smallholder farmers in Jamaica. These include the Diagnostics and Design programme which is a part of an agro-forestry programme that supports the establishment of long term crops; the introduction of the FFS which serves as a driver for agriculture training of farmers (it offers a first-hand type of training for farmers). Stakeholders, such as RADA and JAS, are currently adopting the concept of the FFS. There is also the Livelihood Diversification Project which focuses on identifying strategies to broaden the base for survival activities among farmers, especially during times of natural disasters. This is essentially a risk management strategy that encourages the farmer to broaden the bases of his risks.

The Family Farm in Jamaica

The stakeholders concurred that family farms in Jamaica are characterised by traditional beliefs and values and are bounded by generational lineage. It is marked by strong family bonding through property ownership and prominent use of family labour. The family farm usually has more than one generation and is owned by the operator. It is usually run by individuals who are related to the operator. These individuals do not necessarily have to be blood relatives, but they could be linked by adoptions, common law, marriage, or other connections. The family usually resides on the property, but there are instances where there might be absentee members living abroad or working elsewhere. However, these will still provide financial support (remittance) to assist with the farming operations. They are usually able to demonstrate more organised and structured operations than other farmers. Access to formal credit tends to be less apparent among the farm families compared to their non-farm family counterparts.

The farm families are known to make good use of available resources despite their limited access to support from service providers. They tend to be performing much better than their non-farm family counterparts in terms of resource-use efficiency, practicing environmentally smart operations, and sustainability. Some family members provide indirect support (e.g., housekeeping, producing meals, and other non-farm activities) to the farm family, thereby releasing other members to work directly on the farms and do other farm chores, such as sourcing inputs and marketing.

Ways to develop and formalise the FF system in Jamaica are lacking. There is the issue where the involvement of the children in the farming operation is becoming

less and less apparent. There is, currently, a shift from the traditional extended family structure which better supports the FF system to a more nuclear family type. Therefore, the family farm concept might be a diminishing in Jamaica. Such a trend needs to be understood if policies are to be focused on preserving FF.

Agricultural Policy and the Family Farm in Jamaica

The respondents believe that careful analyses are needed to drive any decision on the issues of land tenure, and thus promoting sustainable development through the FF mechanism. For instance, what is the projected status of the FF population of Jamaica in the long run? To what extent does the ownership of land influence decision making among these farmers? How does the FF system compare with its non- FF counterparts regarding sustainable development? If, on the one hand, the projection is for fewer family farms, then it might not be prudent to channel resources towards development of the FF system knowing the imminent disappearance. If, on the other hand, the projection is showing an increase in the number of family farms, then every effort should be made to mobilise such a practice.

A sense of land ownership is prevalent among family farmers in Jamaica, but this is quite informal due to the apparent lack of proper documentation. This limits the extent to which these farmers are able to advance their practices. On the issue of sustainability, farm families are known to make good use of available resources despite their limited access to support from service providers. They tend to perform better than their non-farm family counterparts in term of resource-use efficiency, practicing environmentally smart operations and demonstrate greater commitments to good agricultural practices. Meanwhile, their counterparts may have better access to support and resources. Thus, strategic policy and strategy development should secure a positive future for the enhancement of those desirable parameters of the farm families and to assure sustainability. They should adopt a holistic approach to development rather than merely focusing on agriculture.

In recent years, more young people are drawn to agriculture through the promotion of entrepreneurship in Jamaica. They are adapting to more innovative and business approaches to agriculture. As such, agricultural policies must be designed to support such initiatives. Apparent financial rewards should be an integral part of sustainable development where the issues of climate change, renewable resources use and good agricultural practices are promoted. The youth should understand the relevance of the family support, the element of trust, and deep sense of ownership. They should also learn how to access the external support structure that will improve the possibility of success.

The fundamental principle is to build the capacity of the farm family for it to adequately serve its food security needs. With the provision proper education, basic amenities and public goods within rural communities, technology and new innovations can be transferred to the farm family through its younger members. A more effective strategy would be to bring the training to the community rather than sending training trainees elsewhere. Efforts should be made to sustain essential generational attributes of the farm family and identify ways by which the family unit might be strengthened.

ANNEX VIII: FARM FAMILY CHARACTERISTICS OF THIRTEEN FAMILY FARMS IN SAINT VINCENT AND THE GRENADINES

Parameters	Respondent 1	Respondent 2	Respondent 3	Respondent 4	Respondent 5
Type of Farm	Mixed farming: root crops, cocoa, citrus, pigs; 40 yrs.	Crop farming: carrots, flavour peppers, corn, squash, heading to organic; 2 yrs.	Mixed farming: pineapples, peanuts, sweet peppers, sweet potatoes, cattle, pigs, goats; 10 yrs.	Mixed farming: root crops, vegetables, sheep, rabbits, poultry; 10 yrs	Mixed farming: plantains, yams. sweet potato, cattle; 40 yrs
Tenure	Lease from State	1 freehold parcel and 1 freehold parcel of his cousin	Lease from private owner at EC\$350 per year	Freehold	Land sharing arrangement
Size (ha)	2	2	3.2	4.5	2.2
Family Involvement	Works with wife; three sons help routinely	Only he operates the farm; his family is in Anguilla	Operates the farm with his nephew	Both husband and wife are exclusive active	A loner who includes his nephew sometimes
No. of Generations	2	No generation history	No generation history	2	1
Residence	Nearby in village	Building a house on the land	Lives in a farm homestead	Lives on the farm	Lives 1 mile from farmland
Education	Primary level, Technical Centre	Tertiary level in banking	Primary level	Secondary level with certificate training	No schooling
Age (yrs), Owner	69	59	44	45	60
Labour	Farmer full-time, Spouse-part-time (pigs); sons and paid labour occasionally	Self and three paid labourers	Farmer and nephew full-time, occasionally employs labour	Farmer, spouse and brother in law, occasionally employ labour	Mainly himself, occasionally employs labourers
Capital/ Finance	Sale of produce	Retirement funds and farm sales	Sale of produce	Sale of produce	Crop sales
Marketing/ Disposal	Farm gate sales	Supermarkets and hucksters	Farm gate sales to hucksters and other retailers	Farm gate	Retailers and hucksters

Returns from Farm to Family	Relies on income to support family	Very little	He and his nephew rely on income to support them. No children	Relies on farm income to support he and his young family	Relies on income to support his family
Government/ Other Service Providers	Gov't pension, fertiliser support	Incentive for jeep purchase	Nil	Farm state support funds. Incentive for jeep purchase	Nil
Community Involvement	Farmer group member	Intends to join the farmers' group in the area	Farmers groups in the area are unsustainable	Three community farm groups	Does not belong to a farm group
Comments	Farmer's age is threatening the sustainability	New entry with family land traditions; not really in the best circumstance to develop a true family farm	A youthful family farm with a unit of uncle and nephew	A youthful family farm unit of farmer, spouse and brother-in-law	Does not seem to meet criteria to be called a family farm

Note: Date on which data was compiled into table - 15 February 2016.

ANNEX VIII: FARM FAMILY CHARACTERISTICS OF THIRTEEN FAMILY FARMS IN SAINT VINCENT AND THE GRENADINES

Parameters	Respondent 6	Respondent 7	Respondent 8	Respondent 9
Type of Farm	Mixed farming: root crops, sorrel, flavour peppers, legumes, sheep, goats; 40 yrs	Mixed farming: root crops, cauliflower, legumes, herbs, cocoa, tomatoes, goats, rabbits; 40 yrs	Mixed farming: root crops, coconut, legumes, sorrel, goats, cattle, pigs, sheep; 20 yrs	Mixed farming: organic crop production, herbs, rabbits, sheep, flowers, ornamental plants and agro tourism
Tenure	Freehold	Freehold	Parcel owned by absentee owner who lives in Canada	Freehold family land
Size (ha)	2.2	1	4.5	2
Family Involvement	Mother and daughters	Mother, 1 son, father is now sick	Farmer, partner, son	All family members
Generations	1	1	1	2
Residence	Lives nearby	Lives nearby	Mother and son live in the city; partner lives on land	Live on property
Education	Primary level	Parents - primary level, son - secondary level	Primary level, son attending Tech Institute	Secondary level and tertiary level
Age (yrs), Owner	63	63	57	61
Labour	Farmer, daughter, occasional labour	Family labour, occasional employ farm labour	Family members	Family labour
Capital/Finance	Crop sales	Crop sales, other income from children's occupation	Crop and livestock sales	Sale of commodities and services
Marketing/Disposal	Hucksters, retailers, market vending	Extra produce retails in city market	Hucksters, farm gate, retailers, makes farine	Farm gate and special consumers of organic products
Returns from Farm to Family	Relies on income to support the farm	Use most of the produce in large family	Some of food is eaten but most sold	Use much produce from the farm
Government/Other Service Providers	Nil	Nil	Nil, tried to get some sacks of manure recently but did not	Nil
Community Involvement	Does not belong to farm groups	Son in young farmer's club	Used to be in a defunct pineapple farmers group	Has an organic farm group
Comments	A female, single headed family farm	A family farm unit that is slowly eroding as parents get older	Unique FF arrangement	Good family farm model

Note: Date on which data was compiled into table - 15 February 2016.

ANNEX VIII: FARM FAMILY CHARACTERISTICS OF THIRTEEN FAMILY FARMS IN SAINT VINCENT AND THE GRENADINES

Parameters	Respondent 10	Respondent 11	Respondent 12	Respondent 13
Type of Farm	Mixed farming: vegetables, fruit trees, sheep, broiler chickens	Mixed farming: vegetables, pigs; used to be a large banana farmer	Mixed farming: vegetables and livestock	Crop farming: vegetables
Tenure	Freehold and leasehold	Freehold	Freehold	Freehold
Size (ha)	1.75	4	2	2
Family Involvement	Female headed, partner, son and daughter who lives abroad	Family and field labourers from the village	No family farm members. He lives with his sister and away from his children and spouse	None, she is a single headed farm household
Generations	1	2	2	2
Residence	Live on property	Live on property	Live nearby	Live at her residence in the village
Education	Primary (2) Tertiary (3)	Secondary	Lower primary	Primary
Age (yrs), Owner	61	51	52	35
Labour	Family labour, occasional paid labour	Family farm labour and village field labour	Mainly self with occasional employment of labour	Self but occasionally employs labour
Capital/ Finance	From proceeds of farm and occasional contribution from professional family member remuneration	Farm sales and funds from other family employment	From sale of crops	From sale of produce
Marketing/ Disposal	Farm gate, supermarkets and hucksters	Supermarkets, farm gate sales, hucksters	Supermarket and as a retailer in the city market	Retail vendors, supermarkets, self-retailing
Returns from Farm to Family	Use much produce from farm	Use produce in the household, farm sales have contributed to improved quality of life for family	Use a small amount for him and sister. Funds from farming may support his other livelihood activities	Use all proceeds to support two young children and herself

Government/ Other Service Providers	Vehicle concessions, gov't sometimes cut fields and prepare lands, fertiliser distribution; had an insurance benefit regarding spouse	Vehicle incentive, recently he did not qualify because of the imposition of criteria which he did not meet	Nil, does not seem interested in gov't incentive programmes	Nil
Community Involvement	Use to be active in a farmers group, had a sweet potato processing group which is now country-wide	Seem to be a leader in the community especially for providing information for community members on agriculture	Trying to form a group in his area	No farm groups in her area; does not partake in other community groups
Comments	An outstanding family farm effort	Aging leader may affect sustainability	Seems like a loner	Seems like a loner on his family lands

Note: Date on which data was compiled into table - 15 February 2016.

ANNEX IX: DISCUSSIONS WITH STAKEHOLDERS IN SAINT VINCENT AND THE GRENADINES

Agriculture and Food Security in Saint Vincent and the Grenadines

The stakeholders in this group discussion were from farmers' organisations and several sub-departments of the country's Ministry of Agriculture. There was a main contingent of extension agents who come from strategically placed offices throughout regions within the island. There were also women's groups. Absent were agricultural input suppliers, representatives from other Ministries who may have direct and indirect responsibilities to promote agricultural initiatives. Also absent were representatives of the banana industry which has suffered decline over the last decade and finally missing are representatives of the larger farmers on the island. The 2000 census which is the most recent one records a population of holdings with more than 10 hectares of land size as less than 1%.

Agricultural GDP in Saint Vincent and the Grenadines (SVG) still contributes to the economy at a much higher level than other countries within the Caribbean. This group of stakeholders noted the importance of the occupation. They endorse agriculture's role to meet food security objectives. There are the challenges with poor infrastructure, an obvious rain-fed system and a disheartening attitude to agriculture by the general population. Most producers live near to their holdings rather than on them. Therefore, they must travel some distance to their lands. Praedial larceny affects farm profitability. There is the use of traditional technologies and many producers rely on basic tools to operate their holdings. Many producers are trying to minimise the use of toxic pesticides although this is inevitable at times. There is an interest in the use of compost and manure instead of chemical fertilisers. Some producers label themselves as organic producers, which helps to minimise their use of toxic chemicals. The island has good soil and there is a supply of skilled labour, although labour productivity and availability is another impediment to increased productivity.

Smallholder Farming

As the desk study has already indicated most of the farm sizes in SVG are less than ten hectares and the majority are less than two hectares. There was a conclusion that the size of farms and their designation as small, medium or large is very relative. Two factors may become important: the quantity of output and the use of mechanisation. Yet, most stakeholders think that SVG is predominantly populated by small farms. Some equated the family farm with the small farm. However, as the discussion continued there was a discerning difference between the two.

The farm holdings are usually separate from where the farmers reside. They must usually travel some distance before reaching them. Besides, an often unmaintained route to their holdings, farmers are comfortable trekking to their farms.

There have been attempts by the farmers to keep farms as family farms, but this is affected by the lack of interest by the young members of the farm. The young are

distracted from continuing the traditions of the older family members. The following reasons were presented: the seeming drudgery of farming especially with traditional yet popular tools; the heavy losses on farms due to stealing of produce; the lure to city life as there was distinct preference by many young men to work in security establishments in Kingstown rather than to work on the farm. Those who do not work in the city prefer to lie idle during the day as they still get cared for by the family structure that culturally exists. Then some feel that the labour remuneration of EC\$40 (US\$20) per day is inadequate.

The resolve regarding attracting youths to agriculture seems to be in the school community from early in a child's schooling. The schools must introduce agriculture as an essential and useful aspect of SVG livelihood. There must be better links between school feeding programmes and local agriculture. Links to assist with the marketing of local produce can also be developed with the country's state institutions like the hospitals and prisons. Farmers can also enter negotiations with the younger folk with regard to an exchange of support which both groups (i.e., the parents and their children) needed and which each group can exclusively provide.

There must be better controls on praedial larceny. There was the reported incidence of the stealing of the produce which one group had generated for the school feeding programme in its area.

Parents, advertisers, and extension workers must provide better images of the agricultural occupation and must encourage the use of more local food and other agricultural products which are generally healthier. They must also desist from promoting agriculture as an occupation of hardship and drudgery.

The Family Farm in Saint Vincent and the Grenadines

As previously indicated, there were differing views regarding what is a family farm. Some stakeholders felt it was not different from a small farm, others felt it was different. Eventually the conversations were able to discern differences.

On a family farm, there are strong traditions to sustain the farm from one generation to the next. These traditions are inculcated by the family values which may exist and the yearning to contribute to food security. These values are mentored by the head of the household who may belong to either gender.

There is the feature of ownership. A family farm has more secure tenure, be it from a state or private mechanism. This contributes to the sustainability over a long period of time.

Some family farms continue because the head of the family unit actively engages all family members in the farming occupation, whether or not these members have other occupations. There was also a role for social media as this was a popular method of communication, especially among younger people. Social media was seen as a useful mechanism to market agricultural commodities and to engage

young people whose constituency agriculture continues to lose. There was even the view that if young people see the farm as being able to bring funds which can repay student loans, this might help improve the attraction of young people to their family farms.

Some participants noted how retirees were attracted to investment in farming and suggested that they could be one vehicle for rehabilitating family farm structures and farming investments, generally.

There is need to have family members contribute to the labour on family farms, but this was not an exclusive feature of the family farm. Once the decisions are made by a family mechanism, the farm may employ labour from which ever source possible. This is so because labour is sometimes scarce and farmers have to rely on whatever labour is available at any point in time.

The group noted that the banana production business had for a long time provided stability to farming households and it was able to keep families focussed on sustain their farms. Much had to do with the steady income which banana production assured every two weeks.

Agricultural Policy and the Family Farm

Firstly, the IYFF was celebrated on the island in a seeming low key fashion. None of the stakeholder groups which were present was able to indicate exactly what they did to celebrate the IYFF. There was mention of the fact that SVG had won the poster competition for the Caribbean region. This competition was promoted by FAO for the Caribbean region and among young people. There were also activities which coincided with FAO's annual World Food Day celebrations held in October 2014. There was 'light' mention that the extension services recognised the event. Although no tangible evidence was presented, it was mentioned that the services provided training for the farmers. None of the stakeholder groups were represented at the CWA which was held in Suriname and had as one of its themes the IYFF.

There was the feeling that the extension advisory services could take more responsibility to be creative in its approaches when it comes to advice on marketing, especially when it comes to value addition to the commodities which the agricultural sector produces. The services can also help to form appropriate groups which can modernise the country's agriculture. If the service becomes more proactive, then it can assist in developing the right policies for agricultural development and, consequently, different aspects of FF for instance in providing the best incentives.

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ANNEX X: DISCUSSIONS WITH CAO AND DCAO, SAINT VINCENT AND THE GRENADINES

Agriculture and Food Security in Saint Vincent and the Grenadines

Agriculture continues to be an important occupation in the island. There is a definite trend in having it contribute to food security. The farmers diversify their enterprises so that there is always food for them. They tend to use animals as 'mobile capital.' This means that the farmers will rear livestock and sell them when they need some capital. A main pillar of support for the general population is that of remittances from abroad. It was noted that 13,000 barrels of imports were cleared from the port during December 2015. Given the fact that there are approximately 7000 farm holdings, this is a large quantity of barrels. Also, there will still be regular monetary transfers from abroad.

There are challenges to adjust to changes in the decline of the importance of bananas from both the viewpoint of the quality of bananas produced and the quantity produced. During those previous times, the banana farmers got a regular (every two weeks) and secure income. Some even made more money than the average civil servant. This is not the case today, but efforts must be made to keep agriculture as an important contributor to the economy. One urgent issue is that of succession planning within the banana industry. The longstanding chief is about to retire and there is insufficient planning for his replacement. He may have to stay on for a while longer.

There is the concern that agricultural lands are moving into housing. There is also the matter of land fragmentation where the already small parcels are becoming smaller as they must be shared among more members of new generations. Drastic legal action must be taken by initiating laws which will prevent these trends from occurring. There was also the idea that if farmers could see their lands worthy of a return per square foot (e.g., EC\$1) through agricultural endeavours, then farmers will be inclined to keep these lands in agriculture.

The officers raised the matter of youth involvement in agriculture. The system will have to engage their interest through ICTs which they have at their disposal. There is even a 'one laptop per child' policy and the young people could contribute to the sector by using their laptops to assist in updating the farmers' involvement in better production techniques. Generally, agriculture has to return to the centre of planning and development within the education portfolios of the country. One aspect of this education must deal with entrepreneurship. There must be visions developed which link the agriculture with nutrition and health outcomes.

The officers expressed caution regarding the role of incentives and 'giveaways' within the sector. These may lead to a lack of appreciation and, eventually, become a disincentive.

While there is skilled labour available for the sector, there is still need to inject new skills into the sector. Sometimes, labour productivity is a concern and this is perhaps related to the low wages paid to labourers.

Finally, the officers gave a brief insight into the farming support company through which farmers can access investment and low interest funds in order to improve their agriculture endeavours. This programme is working well and has been able to provide opportunities for the expansion of agricultural businesses. This programme can be maintained for a long time if farmers repay their loans.

Smallholder Farming

Like the stakeholders, the officers are aware that the majority of farms on the island are smallholder operations. Yet, the 'small is relative' paradigm is once again operative. Hence, there could be farms which are small in size but have large outputs. It is about superimposing size with productive capacity.

The Family Farm in Saint Vincent and the Grenadines

There was a conclusion that the family farm must be given focus in much the same way as the farms managed by young people, female farmers, part-time farmers, or new entries like retirees. The small farmers cannot be 'an everybody group' when it comes to planning. While the family structural development has undergone severe cleavages due to slavery and indentureship, there still exist family farm structures which need to be characterised as there has been a regroup. There are also many nuances involved. There is the additional perspective that many farmers are getting older and that is cause for some type of succession planning.

The family farm is characterised by an ownership factor whereby the family either owns the land outright or the family has prolonged control over the land. The land is farmed by family decisions or family-related decisions. There is a level of utilisation which meets family needs and which supports livelihood goals. FF helps to maintain community governance and management. It provides an environment in which young people can socialise with the desired values which elders wish to see.

Agricultural Policy and the Family Farm

With regard to policy, there are no specific policies which are in place to help family farms in SVG. While there was some regard to the matter of FF during the IYFF, there was no decisive effort. SVG attended the CWA, but there were no specific demonstrations and articulations regarding family farms. There is recognition that in other parts of the world there is adequate emphasis on family farms and that the Caribbean can follow, accordingly. There is the suggestion to set benchmarks which can be measured against some future date. There was lukewarm response to the suggestion that agricultural labour fees can be topped up.

The officers felt that extension can play a role in promoting FF on the island.

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ANNEX XI: QUESTIONNAIRE FOR FARMERS IN GUYANA, HAITI, JAMAICA AND SAINT VINCENT AND THE GRENADINES

1. NAME:
2. ADDRESS:
3. TELEPHONE CONTACT:
4. OTHER CONTACT:
5. HEAD OF HOUSEHOLD:
6. SPOUSE /PARTNER INVOLVED IN FARMING: YES/NO
7. LIVELIHOOD ACTIVITIES ON THE FARM/OTHER ACTIVITIES:

FAMILY MEMBER	NAME	AGE	M	FT	LIVELIHOOD ACTIVITIES ON THE FARM/ OTHER ACTIVITIES
			F	PT	
HEAD OF HOUSEHOLD					
SPOUSE					
PARTNER					
SIBLING 1					
SIBLING 2					
SIBLING 3					
SIBLING 4					
OTHER					
OTHER					
OTHER					
OTHER					

8. LAND SIZE: Parcel 1 _____ Converted to Hectares _____
 Parcel 2 _____ Converted to Hectares _____
 Parcel 3 _____ Converted to Hectares _____
 Parcel 4 _____ Converted to Hectares _____

8a. In your country, is this small/medium or large? (Brief explanation) _____

13. EDUCATION

FAMILY MEMBER	NAME	AGE	M	FT	PRIMARY SECONDARY TERTIARY OTHER
			F	PT	
HOUSEHOLD HEAD					
SPOUSE					
PARTNER					
SIBLING 1					
SIBLING 2					
SIBLING 3					
SIBLING 4					
OTHER					
OTHER					
OTHER					
OTHER					

14. LABOUR

FAMILY MEMBER	NAME	AGE	M	FT	NO OF HOURS PER DAY/ DESCRIPTION OF LABOUR /COSTS-VIRTUAL OR REAL
			F	PT	
HOUSEHOLD HEAD					
SPOUSE					
PARTNER					
SIBLING 1					
SIBLING 2					
SIBLING 3					
SIBLING 4					
OTHER					
OTHER					

15. SOURCE OF FINANCES/QUANTUM

ROUTINE INVESTMENT FUNDS _____

NEW CAPITAL FUNDS _____

16. PROPERTY VALUE AT TIME OF VISIT

ITEM	VALUE IN LOCAL CURRENCY
LARGE EQUIPMENT	
SMALL EQUIPMENT	
MANAGEMENT N COMMUNICATION EQUIPMENT	
LAND	
HOUSE	
CONSUMABLES- FEEDSTOCK	
CONSUMABLES –FERTILIZERS ETC.	
CROPS	
LIVESTOCK	
OTHER	
OTHER	
OTHER	
OTHER	

17. Describe your farm operations

18. Describe the major technologies used

22. What incentives have you received from the Government or other organisations which helps you with your farming?

Type of Incentive	Amount/from whom/ or other description	Frequency	Additional Info
VEHICLE			
FERTILISER INPUTS			
PESTICIDE INPUTS			
WEEDKILLER INPUTS			
LABOUR			
OTHER			
OTHER			
OTHER			

23. COMMUNITY LEADERSHIP

FAMILY MEMBER	NAME	M	FT	COMMUNITY ACTIVITIES IN WHICH MEMBER PARTAKE
		F	PT	
HEAD OF HOUSEHOLD				
SPOUSE				
PARTNER				
SIBLING 1				
SIBLING 2				
SIBLING 3				
SIBLING 4				
OTHER				
OTHER				

24. What contribution does your family farming system make to policy decisions within the Ministry of Agriculture, regionally or internationally?

25. What motivates your family to perpetuate this type of family farming?

26. What are the major challenges you face in your family farming?

27. Any other comments you wish to make?

Thank you!

ANNEX XII: QUESTIONS FOR STAKEHOLDERS

What is a family farm?

How do you differentiate between family farms and other farms in your practice?

Are small farmers, family farmers?

How many family farms do you think exist in your country?

Are family farms formally acknowledged or represented at the institutional or government level in your country?

What major benefits are to be derived from the development of family farming in your country?

What programme(s) are currently in place to support family farms?

What is the biggest problem facing a family farm in your country?

What major challenge(s) are you likely to encounter in an attempt to develop family farming in your country?

How could you better support the members of a family who belong to a family farm?

Did you know of the International Year of the Family Farming (IYFF)?

What did you do to recognise family farms during the IYFF?

What is the biggest problem facing agriculture in your country?

What does your organisation do for farming in your country?

What does your organisation do for family farm?

ANNEX XIII: DATA FOR FIGURES 3, 4 AND 5

Table A: Age group and level of education of the head of household among the sample family farms

Educational Level Attained		Age of head of household					Total
		≤30 years of age	31-40 years of age	41-50 years of age	51-60 years of age	>60 years of age	
Head of household education	None	0	0	0	2	1	3
	Primary	0	2	7	8	6	23
	Secondary	1	4	2	6	7	20
	Tertiary	1	1	1	1	0	4
Total		2	7	10	17	14	50
		Valid		Missing		Total	
		N	Percent	N	Percent	N	Percent
Head of household education *Age of head of household		50	98.0%	1	2.0%	51	100.0%

Table B: Livelihood activities and status of the head of household among the sample family farms

Livelihood activities		Status		Total
		Part-time farmer	Full-time farmer	
Livelihood activities on the farm/other activities	Manage farm	0	13	13
	Farming	5	26	31
	Teacher	1	0	1
	Armed forces	1	0	1
	Labourer	3	0	3
	Private work	1	1	2
Total		11	40	51

Table C: Livelihood activities and status of spouses among the sample family farms

Livelihood activities	Spouse Status as Full-time or Part-time Farmer		Total
	Part-time farmer	Full-time farmer	
Manage farm	0	2	2
Farming	3	6	9
Housewife	1	0	1
Oversees some activities on the farm	1	0	1
Office clerk	1	0	1
Teacher	2	0	2
Total	8	8	16

ABOUT THE AUTHORS



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David Dolly is an Agricultural Consultant who specialises in Agricultural Extension Practice and Extension Education. He has many national, regional, and international experiences. Dr Dolly holds degrees in Agriculture and Extension Education from The University of the West Indies (UWI) and the University of Wisconsin, Madison, USA. He is a Fellow of the Association for International Agricultural and Extension Education (AIAEE). He recently retired from lecturing at the UWI, Saint Augustine Campus but continues to supervise several post graduate students who are pursuing Master's and PhD degrees. His subject areas of teaching at UWI were extension programming and practice, rural development, gender studies and island food systems. He has been the recipient of an 'Excellence in Teaching' award from UWI. Throughout his career, he has always been close to producing agricultural commodities. He owns a 10-acre farm in the lower Manzanilla area of Trinidad where he produces cocoa, bananas, lumber, and a variety of local fruits. Dr Dolly assists in leading the newly formed Caribbean Agricultural Extension Providers Network (CAEPNet) which has been ably supported by the Global Forum for Rural Advisory Services (GFRAS). As such, he is on the International Steering Committee of GFRAS. CAEPNet hopes to outreach the entire Caribbean soon.



Glenroy Ennis

Glenroy Ennis currently serves as a senior agricultural advisor to Government and private sector officials in the Caribbean region, advising primarily on climate change, value chain analysis, communication skills in agriculture and sustainable development initiatives. He holds an MPhil in Agricultural Economics and a BSc in Agriculture from The University of the West Indies (UWI). He also holds a BEd from York University, Canada where he majored in Urban Diversity in Education. He is currently a licensed teacher with the Ontario College of Teachers. Mr. Ennis is a qualified agriculturalist and educator with more than 20 years of experience applying cross-cutting expertise and knowledge in agriculture and related fields. He has served as a Caribbean Regional Expert on several European Union (EU) framework assignments, for instance, "Identification and Formulating – Support to Agriculture and Rural Development Policies for Small and Isolated States in the Caribbean and Pacific Regions." During that time, Mr. Ennis did extensive analysis of the traditional agricultural export sectors of the Caribbean, such as sugarcane and banana. This work successfully led to the design and programming of support to the agricultural sectors of African, Caribbean and Pacific (ACP) developing states. Other related sectors where he gained his experiences include: policy development and planning; business and project development; education and training; private sector development; research; and Strategic Environmental Assessment (SEA). Mr Ennis grew up in a rural agricultural environment, namely, Alps, Trelawny, Jamaica where he still attempts to introduce new ideas for rural development and agriculture.



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